

## **APPENDIX 3**

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### **Adopted Mitigation Measures**

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# Adopted Mitigation Measures

### Introduction

The table that follows presents Mitigation Measures (MM) adopted in the Record of Decision (ROD) for the Alta East Wind Project. The purpose of the table is to provide a single comprehensive list of the measures that will be implemented to avoid or reduce impacts of the Alta East Wind Project.

Revisions are shown in ~~striketrough~~ (deleted) or underscore (added) text.

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<b>Air Resources</b>		
<p><b>MM 4.2-1: Construction Fugitive Dust Emissions Reduction.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the Project Proponent shall develop a Fugitive Dust Control Plan that will be implemented during project construction. The Plan shall be prepared in compliance with Eastern Kern Air Pollution Control District (EKAPCD) Rule 402 to reduce PM10 and PM2.5 emissions during construction. At minimum, the Fugitive Dust Control Plan shall include the following:</p> <ol style="list-style-type: none"><li>1. Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan;</li><li>2. Description and location of the construction operation(s);</li><li>3. Listing of all fugitive dust emissions sources included in the construction operations;</li><li>4. In addition to compliance with all applicable EKAPCD and California Air Resources Board (CARB) requirements, the following dust control measures shall be implemented:<ol style="list-style-type: none"><li>a. All onsite unpaved roads shall be effectively stabilized using soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board registered soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation.</li><li>b. All material excavated or graded will be sufficiently watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. During the duration of construction, all excavated soil piles shall be watered periodically or covered with temporary coverings.</li><li>c. Construction activities that occur on unpaved surfaces will be discontinued during windy conditions when activities cause visible dust plumes. Construction activities may continue if dust suppression measures are used that follow the Eastern Kern Air Pollution Control District's Reasonably Available Control Measures (Rule 402, Table I); or more stringent measures. At minimum, the measures shall ensure that: (1) the visible dust plumes are not transported off the Project site or within 400-feet of any regularly occupied structure not owned by the Project Proponent; and, (2) that the visible dust plumes generated from linear construction are not transported more than 200-feet beyond the centerline of the linear facilities and do not cause a traffic obscuration hazard on public roads.</li><li>d. Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday.</li><li>e. Rattle traps or a wheel-washing system shall be installed and used to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project property.</li><li>f. All hauling materials should be moist while being loaded into dump trucks. All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).</li><li>g. Drop heights should be minimized when loaders dump soil into trucks.</li><li>i. Traffic speeds on unpaved roads shall be limited to 15 miles per hour.</li><li>j. Disturbed areas should be re-vegetated as soon as possible after disturbance or during</li></ol></li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
the appropriate growing season.		
<p><b>MM 4.2-2: Construction Equipment Emissions Reduction.</b> The Project Proponent shall continuously comply with the following during construction:</p> <p>1. To control emissions from all off-road construction equipment:</p> <p class="list-item-l1">a. All off-road construction-related portable diesel engines that are not registered under the California Air Resources Board’s Statewide Portable Equipment Registration Program (PERP) and which have a rating of 50 horsepower or more, shall meet the Tier 3 California Emission Standards for Off-road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1); unless such engine is not available for a particular item of equipment. In the event a Tier 3 engine is not available for any off-road engine, that engine shall be equipped with retrofit controls that would provide nitrogen oxides and particulate matter emissions that are equivalent to a Tier 3 engine.</p> <p class="list-item-l1">b. All equipment shall be turned off when not in use. Engine idling of all equipment shall be minimized.</p> <p class="list-item-l1">c. All equipment engines shall be maintained in good operating condition and in proposed tune per manufacturers’ specification.</p> <p>2. To control Nitrogen Oxides (NOx) emissions from on-road heavy-duty diesel haul vehicles that are contracted for use to haul equipment and materials for the project:</p> <p class="list-item-l1">a. 2007 engines or pre-2007 engines with California Air Resources Board certified Level 3 diesel emission controls will be used to the extent possible.</p> <p class="list-item-l1">b. All on-road construction vehicles, except those vehicles with California Air Resources Board certified Level 3 diesel emissions controls, shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to worker personal vehicles.</p> <p class="list-item-l1">c. All equipment shall be turned off when not in use. Engine idling of all equipment shall be minimized.</p> <p class="list-item-l1">d. The construction contractor shall ensure that all on-road construction vehicles are properly tuned and maintained in accordance with the manufacturers’ specifications.</p>	Yes	
<p><b>MM 4.2-3: Operation Fugitive Dust and Equipment Emissions Reduction.</b> The Project Proponent shall continuously comply with the following during project operation:</p> <p>1. To control fugitive dust emissions from the use of unpaved roads on the site:</p> <p class="list-item-l1">a. The main access road for employees and deliveries to the O&amp;M complex and to the onsite substation shall be paved or effectively stabilized using soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board registered soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation.</p> <p class="list-item-l1">b. The other unpaved roads at the site shall be stabilized using soil stabilizers so that vehicle travel on these roads does not cause visible dust plumes.</p> <p class="list-item-l1">c. Traffic speeds on unpaved roads shall be limited to no more than 15 miles per hour.</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>Traffic speed signs shall be displayed prominently at all site entrances and at egress point(s) from the O&amp;M facility and onsite substation.</p> <p>2. To control particulate emissions from onsite dedicated equipment exhaust:</p> <p>a. All on-site off-road equipment and on-road vehicles for operation/maintenance shall be new equipment that meets the recent California Air Resources Board engine emission standards or alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, as appropriate.</p> <p>b. All equipment shall be turned off when not in use. Engine idling of all equipment shall be minimized.</p> <p>c. All equipment engines shall be maintained in good operating condition and in proposed tune per manufacturers' specification.</p>		
Cultural Resources		
<p><b>MM 4.4-1:</b> Prior to the issuance of grading or building permits by the County or a Notice to Proceed by the BLM, the Proponent shall submit a Historic Property Treatment Plan (HPTP) that details how historic resources located within the project area will be treated. The HPTP shall be prepared at the sole expense of the project proponent and shall be signed/stamped by an archaeologist that is registered with the Register of Professional Archaeologists (RPA). The final HPTP shall be submitted for review by the Bureau of Land Management, any consulting parties, and the Kern County Planning and Community Development Department.</p> <p>The HPTP shall be organized into chapters that include the following elements:</p> <p>1. A final site plan that demonstrates how the project will utilize existing roads and utility corridors to the maximum extent feasible to minimize the number and length/size of new roads, lay-down areas, and borrow areas. The site plan shall also include a separate sheet which illustrates how the project will avoid and protect identified historical resources.</p> <p>2. A Subsurface and Evaluative Testing element stating that if certain ground disturbance activities cannot be located at least 60-feet from the boundaries of an archaeological site, then subsurface testing shall be conducted. The HPTP shall describe in detail the actions to be taken and shall be reviewed and approved by the BLM and Kern County.</p> <p>Should additional evaluative testing is deemed necessary; it shall be summarized in an Evaluative Testing Plan that is provided to the Kern County Planning and Community Development Department and Bureau of Land Management. The Plan shall include the following information:</p> <p>a. Detailed description of testing methodology that includes a research design (from which to evaluate for National Register of Historical Resources eligibility); excavation plan with rationale for sample size and placement; and, discussion of special studies/ analyses that may be required.</p> <p>b. Description of the methods for controlled hand excavation and surface collection of a representative sample of the site deposit.</p> <p>c. A detailed analysis of the material recovered.</p> <p>d. An assessment of cultural resource data potentials, integrity, and eligibility for listing on</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>the California Register of Historical Resources in a regional context.</p> <p>e. Preparation of a final report with recommendations for impact mitigation if necessary to be reviewed and approved by a professional archaeologist.</p> <p>f. Description of the curation of all artifacts and data from testing evaluations.</p> <p>Resources found to be not eligible shall not require additional mitigation; however, those sites found to be eligible may require data recovery (Phase III). The applicant/holder shall develop a site-specific data recovery plan, that identifies, standard procedures and guidelines for determining sampling intensity, and data recovery methods based on testing results. The Data Recovery Plan shall address research issues that would be investigated and shall consider the project's grading plan, utility plan, irrigation and landscaping plan, and any other plan that delineates areas of project disturbance in determining portions of a significant site that would be investigated.</p> <p>3. A Sensitive Archaeological Locations Monitoring element for monitoring sensitive archaeological locations during ground-disturbing project activities shall be included in the plan which specifies the following:</p> <p>a. The project proponent will provide for a qualified archeologist to monitor earthmoving activities in areas within 60-feet of the identified eligible sites, or in areas that have been determined to have a high potential for resources.</p> <p>b. The archaeologist shall be authorized to halt construction, if necessary, in the immediate area where subsurface resources are encountered.</p> <p>c. The monitoring program shall identify the monitoring requirements for each known cultural resource present at the site.</p> <p>d. The monitor shall maintain a daily log of activities as required by the federal Environmental and Construction Compliance Program (ECCMP).</p> <p>4. The Plan shall include provisions for administration of a workshop to brief all construction-related employees on historic resource procedures; and the provisions shall be developed in accordance with the federal Environmental and Construction Compliance Program (ECCMP).</p> <p>5. Documentation of coordination with Native Americans. The Plan shall include detailed provisions to demonstrate that the project proponent has consulted with all interested tribes and individuals listed by the Native American Heritage Commission. Consultation shall continue throughout the course of planning and construction of the project. Additionally, the project proponent shall notify all applicable tribes of the time and duration of construction activities near culturally sensitive sites, if applicable. The purpose of this notification is to allow for the applicable tribes, at their sole expense, to arrange for a tribe representative, and/or cultural monitor, to be present on site to observe earth-moving activities. The project proponent shall also consult with the applicable tribes regarding site treatment during construction. The plan shall include provisions for full documentation of the consultation process, including records of all contacts and meetings.</p> <p>6. The Plan shall state that archaeological collections, final reports, field notes, and other standard documentation collected during project implementation shall be permanently curated at a facility that meets Guidelines for the Curation of Archeological Collections (California Department of Parks and Recreation 1993).</p> <p>7. The Plan shall identify an Unanticipated Discovery Protocol for recording and treating human</p>		

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remains or other potentially significant cultural resources that are discovered during construction and/or operation activities. This Protocol shall be developed in accordance with applicable laws, regulations and guidelines and shall state that in-place preservation and protection from further disturbance is preferred.		
<p><b>MM 4.4-2:</b> Prior to issuance of grading or building permits by the County or a Notice to Proceed by the BLM, the Project Proponent shall provide the BLM and Kern County Planning and Community Development Department with documentation that an archaeologist that is registered with the Register of Professional Archaeologists (RPA) has reviewed the final site plan and has concluded that:</p> <ol style="list-style-type: none"> <li>1. All grading, building and construction plans have been prepared in a manner consistent with professional standards; that all cultural resource investigations were documented in high quality technical reports that meet professional standards; and that reports shall be made available to professional archaeologists and (without confidential site location information) to the interested public .</li> <li>2. All facilities and planned ground-disturbing activities would occur within areas that have been intensively surveyed and documented; and,</li> <li>3. Provisions have been made for avoiding and protecting any sites that are eligible or potentially eligible for the National Register of Historical Resources and that the plan has used avoidance of cultural resources sites as the preferred treatment measure in project design. Also, that the project has, to the greatest extent possible, avoided siting of wind turbine generators and support facilities within 60-feet of culturally sensitive sites.</li> </ol>	Yes	
<p><b>MM 4.4-3:</b> Prior to ground-disturbing activities that affect any portion of the project area that is beyond the area previously surveyed, the Project Proponent shall adhere to the following:</p> <ol style="list-style-type: none"> <li>1. No work shall be conducted in those areas until approval has been received from the BLM and Kern County Planning and Community Development Department;</li> <li>2. Provide for a qualified archaeologist to conduct an initial Phase I evaluation (records search and intensive pedestrian surveys) of all new areas that would be affected (i.e., within the revised area of impact);</li> <li>3. Provide a supplemental technical report to the BLM and Kern County Planning and Community Development Department discussing the supplemental Phase I evaluation and description of any eligible sites;</li> <li>4. Based on the results of the supplemental Phase I evaluation, ensure that the qualified archeologist provides documentation to the BLM and Kern County Planning and Community Development Department verifying that all newly identified sites would be avoided and that all ground-disturbing activities would occur at least 60-feet away;</li> <li>5. If the revised location of facilities avoids newly identified sites but ground-disturbing activities are located within 60 feet of the sites, provide for a qualified archeologist to monitor during initial ground-disturbing activities, as well as exclusionary fencing; and,</li> <li>6. If the revised location of facilities impacts newly identified sites (e.g., sites could not be avoided), consult with the BLM and Kern County Planning and Community Development Department regarding further requirements, possibly including a Phase II evaluation, data</li> </ol>	Yes	

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recovery, and additional mitigation.		
<b>MM 4.4-4:</b> Prior to the issuance of grading or building permits by the County or a Notice to Proceed by the BLM, the Project Proponent shall submit verification to the BLM and Kern County Planning and Community Development Department which demonstrates that exclusion fencing has been installed around the archaeological sites that are located within 60-feet of project facilities and planned ground-disturbing activities.	Yes	
<b>Lands and Realty</b>		
<b>MM 4.6-1: Notice to Proceed.</b> Prior to the issuance of grading or building permits and/or a Notice to Proceed from the BLM, the project proponent shall submit a final project design to the authorized officer of Edwards Air Force Base and China Lake Naval Air Weapons Station. Said final project design, shall be in the form of a detailed plot plan as required by Section 19.64.130 (Detailed Plot Plan Required – Contents) of the Kern County Zoning Ordinance and shall include final specifications on the height and location of the wind turbine generators to be installed as well as the anticipated schedule of each construction phase.	Yes	
<b>MM 4.6-2: Notification to Property Owners.</b> At least 30 days prior to the commencement of grading or building and/or a Notice to Proceed, the project proponent shall mail a copy of the construction schedule to property owners within 1,000 feet of the project site. The purpose of this notification shall be so that property owners are informed as to the time and location of disturbance. Updates shall be provided as necessary.	Yes	
<b>Noise</b>		
<b>MM 4.9-1: Noise Complaint Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall submit a Noise Complaint Plan to the Kern County Planning and Community Development Department and to the BLM for review and approval. The plan shall establish a telephone number for use by the public to report any nuisance noise conditions associated with the construction of the project. The project proponent shall ensure that either (a) the telephone number is staffed 24 hours per day; or (b) the phone number is connected to an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at entrances to the project site during construction in a manner visible to passersby. Kern County and the BLM shall be notified immediately of complaints received. This component shall detail how the project proponent will respond to operational noise complaints, keep the County apprised of all complaints, and document the resolution of those complaints	Yes	
<b>MM 4.9-2: Final Noise Report Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall submit the following to the BLM and Kern County Planning and Community Development Department for review and approval:  1. The project proponent shall submit a final Noise Report for residences located within one (1) mile in a prevailing wind direction, or within one-half (1/2) mile in any other direction of the project boundaries. The Noise Report shall demonstrate compliance with County Code	Yes	



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<p>Chapter 19.64 (Section 19.64.140.J) Wind Energy (WE) Combining District performance standards, and the Kern County General Plan Noise Element policies regarding outdoor and interior noise levels of sensitive receptors.</p> <p>2. The Noise Report shall include evidence which demonstrates that one of the following methods will be implemented to reduce low frequency noise impacts to a less than significant level:</p> <ul style="list-style-type: none"><li>a. Demonstration that limits on the cut-on speed of the wind turbine generators, and how those limits will reduce noise impacts to levels within Kern County performance thresholds;</li><li>b. Showing that using a mix of turbine models and megawatts will reduce noise levels to a less than significant level (to be confirmed during the final review of the plot plan).</li><li>c. Set back turbines to the maximum extent feasible from any designated habitable structure.</li></ul> <p>3. The Noise Report shall show final routing of all transmission lines and ensure that any corona discharge noise from these lines shall not increase ambient noise conditions at any sensitive receptors by 5 dBA or more.</p>		
<p><b>MM 4.9-3: Construction and Operation Noise Reduction Methods.</b> The project proponent shall continuously comply with the following during construction, operation, and decommissioning of the project:</p> <p>1. All construction equipment shall be equipped with mufflers and other suitable noise attenuation devices, that equipment engines are enclosed, and that all construction equipment is in good working order.</p> <p>2. The project proponent shall comply with all elements of the Kern County Ordinance, Chapter 8.36 (Section 8.36.020, Prohibited Sounds), such that no construction will occur at construction sites within 1,000 feet of an occupied residential dwelling between 9:00 p.m. and 6:00 a.m. weekdays and 9:00 p.m. and 8:00 a.m. on weekends.</p> <p>3. A noise disturbance coordinator shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures to resolve the complaint. Signs posted at the construction site shall list the telephone number for the disturbance coordinator.</p>	Yes	
<b>Paleontological Resources</b>		
<p><b>MM 4.10-1: Develop Paleontological Resource Monitoring and Mitigation Plan.</b> Prior to the issuance of grading or building permits by Kern County or a Notice to Proceed by the BLM, the project proponent shall submit a Paleontological Resource Management Plan that details when and where paleontological monitoring will occur and how paleontological resources located within the project site will be avoided and/or treated. The Paleontological Resource Management Plan shall be prepared, at the sole expense of the project proponent, and shall be based on Society of Vertebrate Paleontology (SVP) guidelines and meet all regulatory requirements. The plan shall be submitted for review and approval by the BLM and the Kern County Planning and Community Development</p>	Yes	

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<p>Department.</p> <p>The Paleontological Resource Management Plan shall include the following information:</p> <ol style="list-style-type: none"><li>1. Identification and mapping of impact areas of moderate to high sensitivity that will be monitored during construction;</li><li>2. A coordination strategy to ensure that a qualified paleontological monitor will conduct full-time monitoring of all ground disturbances in sediments determined to have a moderate to high sensitivity. Sediments of low, marginal, and undetermined sensitivity shall be monitored on a part-time basis (as determined by the Qualified Paleontologist);</li><li>3. The significance criteria to be used to determine which resources will be avoided or recovered for their data potential;</li><li>4. Procedures for the discovery, recovery, preparation, and analysis of paleontological resources encountered during construction, in accordance with standards for recovery established by the SVP;</li><li>5. Provisions for verification that the project proponent has an agreement with a recognized museum repository for the disposition of recovered fossils and that the fossils shall be prepared prior to submittal to the repository as required by the repository (e.g., prepared, analyzed at a laboratory, curated, or cataloged);</li><li>6. Specifications that all paleontological work undertaken by the Project Proponent on public land shall be carried out by qualified paleontologists with the appropriate current permits, including, but not limited to a Paleontological Resources Use Permit (for work on public lands administered by BLM) and a Paleontological Collecting Permit (for work on lands administered by California Department of Parks and Recreation); and,</li><li>7. Description of monitoring reports that will be prepared, which shall include daily logs and a final monitoring report with an itemized list of specimens found to be submitted to Kern County Planning and Community Development Department, the project proponent, and an accredited museum into which any recovered fossil specimens are accessioned into within 90 days of the completion of monitoring.</li></ol>		
<p><b>MM 4.10-2: Train Construction Personnel.</b> Prior to grading or building permits by Kern County or a Notice to Proceed by the BLM, the project proponent shall submit evidence of compliance with the following:</p> <ol style="list-style-type: none"><li>1. The project proponent shall provide for a paleontologist to provide all construction personnel training on implementation of the Paleontological Resource Management Plan and specifically procedures to be followed in the event that a fossil site or fossil occurrence is encountered during construction. An information package shall be provided for construction personnel not present at the initial preconstruction briefing. All personnel shall be instructed that unauthorized collection or disturbance of protected fossils will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order.</li></ol>	Yes	
<p><b>MM 4.10-3: Monitor Construction for Paleontology.</b> The project proponent shall continuously comply with the following during all ground-disturbing activities and during project operations:</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>1. Based on the paleontological sensitivity assessment and Paleontological Resource Management Plan, the project proponent shall conduct full-time construction monitoring by the qualified paleontological monitor in areas determined to have moderate to high paleontological sensitivity. Sediments of low, marginal, or undetermined sensitivity shall be monitored by a paleontological monitor on a part-time basis (as determined by the Paleontologist). Construction activities shall be diverted when data recovery of significant fossils is warranted, as determined by the Paleontologist. Monitoring shall be conducted as follows:</p> <p>a. Monitoring of ground disturbance shall consist of the surface collection of visible vertebrate and invertebrate fossils within the project site. Upon discovery of paleontological resources by paleontologists or construction personnel, work in the immediate area of the find shall be diverted and the Project Proponent's paleontologist notified. Once the find has been inspected and a preliminary assessment made, the Project Proponent's paleontologist will notify the BLM and Kern County Planning and Community Development Department of the discovery. If recovery of a large or unusually productive fossil occurrence is warranted, earthmoving activities shall be diverted temporarily around the fossil site, and a recovery crew shall be mobilized to remove the material as quickly as possible. The monitor shall be permitted to photograph and/or draw stratigraphic profiles of cut surfaces and take samples for analysis of microfossils, dating, or other specified purposes, in accordance with the research design.</p> <p>b. Recovered specimens shall be prepared to a point of identification, including washing of sediments to recover smaller fossil remains. Once excavation has reached specified depths, salvage of fossil material from the side walls of the cut shall resume. Specimens shall be identified and curated into a museum repository with a retrievable storage.</p> <p>c. All significant fossil specimens recovered from the project site as a result of the paleontological mitigation program shall be treated (prepared, identified, curated, and cataloged) in accordance with designated museum repository requirements. Samples shall be submitted to a laboratory, acceptable to the selected museum, for identification, dating, and microfossil and pollen analysis.</p> <p>d. Daily logs shall be kept by the paleontological monitor during field monitoring and shall be submitted weekly to Kern County. A complete set of the daily monitoring logs shall be kept on-site throughout the earthmoving activities and be available for inspection. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, the assigned personnel, and the results of the monitoring activities, including rock unit encountered, fossil specimens recovered, and associated specimen data, as well as corresponding geologic and geographic site data. Within 90 days of the completion of the paleontological monitoring, a monitoring report, with an appended, itemized inventory of specimens, shall be submitted to Kern County, the project developer, and the Buena Vista Museum of Natural History.</p>		
<b>Public Health and Safety</b>		
<b>MM 4.11-1: Sales and Use Tax.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall work with County staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Operator	Yes	

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obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project proponent shall allow the County to use this sales tax information publicly for reporting purposes.		
<p><b>MM 4.11-2: Hazardous Materials Business Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall prepare a Hazardous Materials Business Plan in accordance with the California Health and Safety Code and Kern County regulations and shall submit the plan to the Kern County Environmental Health Services Department and the BLM for review and approval.</p> <p>The Hazardous Materials Business Plan shall delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and, establish public and agency notification procedures for spills and other emergencies, including fires. The project proponent shall provide the Hazardous Materials Business Plan to all contractors working on the project and shall ensure that one copy is available at the project site at all times.</p>	Yes	
<p><b>MM 4.11-3: Blasting Plan.</b> If blasting is required, prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall contract with a blasting contractor with experience conducting blasting activities, licensed to use Class A explosives, and licensed as a contractor in the State of California. The blasting contractor shall prepare a blasting plan for the proposed blasting activities to prevent endangering worker safety. The blasting plan shall be submitted to the BLM and to the Kern County Planning and Community Development Department in consultation with the Kern County Public Health Services Department, the Kern County Fire Department, and the Eastern Kern County Air Pollution Control District. The blasting plan shall:</p> <ol style="list-style-type: none"><li>1. Describe procedures to be implemented to protect workers during blasting, such as using a signaling system to alert workers of an impending blast and using blasting mats to prevent or reduce the number of rock particles thrown into the air;</li><li>2. Describe procedures for proper storage and transportation of explosive materials, including protecting explosives from wildfires;</li><li>3. Prohibit blasting during extreme fire danger periods; and,</li><li>4. Comply with the U.S. Bureau of Mines and the U.S. Department of the Interior Office of Surface Mining Reclamation and Enforcement guidelines for minimizing damage to structures from blasting.</li></ol>	Yes	
<p><b>MM 4.11-4: Herbicide Control.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, and if herbicides are utilized, the project proponent shall submit evidence that the contractor or personnel applying herbicides must have all the appropriate State and local herbicide applicator licenses and will comply with all State and local regulations regarding herbicide use; including any terms and conditions of the Pesticide Use Permit issued by the BLM.</p>	Yes	

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<b>MM 4.11-5: Emergency Response Liaison.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall appoint an Emergency Response Liaison to coordinate the reduction of construction-related traffic for the duration of any emergency at or nearby the project site. The BLM, Kern County Fire Department, Kern County Sheriff's Office, and the California Highway Patrol shall be provided with the construction schedule and the on-site contact information for the Liaison prior to construction. The Liaison shall be immediately reachable at all times during project construction. The Liaison shall have radio contact with project construction vehicles at all times to coordinate traffic reduction measures. In addition, the Liaison shall coordinate with the BLM, Kern County Fire Department, the Kern County Sheriff's Office and the California Highway Patrol to establish emergency procedures for access to the project site during an emergency.	Yes	
<b>MM 4.11-6: Spill Prevention, Control, and Countermeasures Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall prepare and submit a Spill Prevention, Control, and Countermeasures Plan to the BLM, the Kern County Planning and Community Development Department, and to the Kern County Environmental Health Services Department for review. The Plan will be for the storage and use of transformer oil, gasoline, or diesel fuel at the site in quantities of 660 gallons or greater. The purpose of the plan will be to mitigate the potential effects of a spill of transformer oil, gasoline, or diesel fuel. The Plan shall include design features of the project that will contain accidental releases of petroleum and transformer oil products from onsite fuel tanks and transformers.	Yes	
<b>MM 4.11-7: Aviation and Hazardous Materials Storage.</b> Prior to issuance of building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall submit documentation of the following:  1. The project proponent shall submit documentation to the Kern County Planning and Community Development Department and the BLM demonstrating receipt of a Determination of No Hazard to Air Navigation from the Federal Aviation Administration (FAA) of Form 7460 1 (Notice of Proposed Construction or Alteration). Documentation shall also be furnished to the Kern County Planning and Community Development Department and the BLM demonstrating that a copy of the approved form(s) has been provided to the United States Department of Defense, Edwards Air Force Base, and the Mojave Air and Space Port. All project components shall have lighting and marking required by the Federal Aviation Administration so not to create a hazard to air navigation.  2. No wind turbine generators shall be constructed within the boundaries of the Kern County Airport Land Use Compatibility Plan.  3. The project proponent shall provide evidence that all fueling, hazardous materials storage areas, and operation and maintenance activities involving hazardous materials will be sited at least 100 feet away from blue-line drainages, as identified on U.S. Geological Survey topography maps and wetlands.	Yes	
<b>MM 4.11-8: Hazardous Materials Management and Property Taxes.</b> The project proponent shall continuously comply with the following during construction and operation of the project:  1. In order to eliminate the risk of generating disease vectors at the site, the Project proponent shall ensure that trash is stored in closed containers and removed from the site at regular	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>intervals. Open containers shall be inverted and construction ditches shall not be allowed to accumulate water. Construction and maintenance operations shall not generate standing water. Naturally occurring depressions, drainages, and pools at the site shall not be drained or filled without consulting with the appropriate resource agency (BLM, Kern County, U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG)) and obtaining the appropriate permits. The environmental monitor will ensure that standing water and large quantities of trash do not accumulate on site. Project compliance shall be verified by the Kern County Building Inspection Department during any on-site inspections.</p> <p>2. Should any additional abandoned or unrecorded wells be uncovered or damaged during excavation or grading, the project proponent shall immediately contact the Department of Oil, Gas, and Geothermal Resources. The project proponent shall comply with established Federal, State, or local procedures for the handling and disposal of any discovered hazardous wastes.</p> <p>3. If, during grading or excavation work, the contractor observes visual or olfactory evidence of contamination or if soil contamination is otherwise suspected, work near the excavation site shall be terminated, the work area cordoned off, and appropriate health and safety procedures implemented for the location by the contractor's Health &amp; Safety Officer. Samples shall be collected by an Occupational Safety and Health Administration-trained individual with a minimum of 40 hours hazardous material site worker training. Laboratory data from suspected contaminated material shall be reviewed by the contractor's Health and Safety Officer. If the sample testing determines that contamination is not present, work may proceed at the site. However, if contamination is detected above regulatory limits, the BLM and the Kern County Public Health Division shall be notified. All actions related to encountering unanticipated hazardous materials at the site shall be documented and submitted to the BLM for federal lands and the Kern County Public Health Division for County lands.</p> <p>4. Payment of property taxes has been determined to be sufficient to mitigate impacts to fire, sheriff and emergency services for the wind component of the project. Written verification of ownership of the project shall be submitted to the Kern County Planning and Community Development Department by April 30 of each calendar year. If the project is sold to a city, county, or utility company that pays assessed taxes that equal less than \$5,000 per turbine per year, then they will pay those taxes plus an amount necessary to equal the equivalent of \$5,000 per turbine. The amount shall be paid for all years of operation. That amount shall be adjusted annually for inflation using the U.S Cities Average - All Urban Consumers (CPI-U) Consumer Price Index provided by the U.S Bureau of Labor Statistics. The fee shall be paid to the Kern County Auditor/Controller by April 30 of each calendar year.</p> <p>5. During construction activities, the project proponent shall reduce construction waste transported to landfills by recycling solid waste construction materials to the extent feasible, such as taking materials to recycling and reuse locations listed in the brochure on recycling construction and demolition materials available on the Kern County Waste Management Department Web site.</p> <p>6. Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall provide a fenced storage area for recyclable materials that is clearly identified for recycling. This area shall be maintained on the site during construction and operations. A site plan showing the recycling storage area shall be</p>		

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
submitted to the Kern County Planning and Community Development Department and Kern County Waste Management Department.		
Recreation		
<b>MM 4.12-1: Coordinate Construction Activities to Minimize Impacts to Recreation Areas.</b> No less than 60 days prior to construction, the Project Proponent shall coordinate construction activities and the project construction schedule with the authorized BLM officer for the recreation areas impacted. The Project Proponent shall schedule construction activities to avoid heavy recreational use periods in coordination with and at the discretion of the authorized officer. The Project Proponent shall locate construction equipment to avoid temporary preclusion of recreation areas in accordance with the recommendation of the authorized officer. The Project Proponent shall document its coordination efforts with the authorized officer and provide this documentation to the Lead Agencies and affected jurisdictions at least 30 days prior to construction.	Yes	
Social and Economic Issues		
<b>MM 4.13-1: Workers Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall comply with the following:  1. The project operator shall encourage all contractors of the project to hire at least 25 percent of their workers from the local Kern County communities. The project proponent shall provide the contractors a list of training programs that provide skilled wind and solar workers and shall require the contractor to advertise locally for available jobs, notify the training programs of job availability, all in conjunction with normal hiring practices of the contractor. The project proponent shall submit a letter detailing the hiring efforts prior to commencement of construction.	Yes	
Geology and Soil Resources		
<b>MM 4.14-1: Geotechnical Study.</b> Prior to the issuance of grading or building permits or Notice to Proceed, the project proponent shall conduct a full Geotechnical Study to evaluate soil conditions and geologic hazards on the project site. The Study shall be prepared and signed by a California-registered professional engineer and shall be submitted for review to: (1) the BLM for federal lands; and, (2) the Kern County Engineering, Surveying, and Permit Services Department for County lands. The Study shall identify the following:  1. Location of fault traces and potential for surface rupture; 2. Maximum considered earthquake and associated ground acceleration; 3. Potential for seismically induced ground shaking, liquefaction, landslides, differential settlement, and mudflows; 4. Stability of existing cut-and-fill slopes; 5. Collapsible or expansive soils; 6. Foundation material type; 7. Potential for wind erosion, water erosion, sedimentation, and flooding;	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<div>8. Location and description of unprotected drainages that could be impacted by the Project; and,</div> <div>9. Recommendations for placement and design of facilities, foundations, and remediation of unstable ground.</div> <div>10. Identify the presence, if any, of potentially detrimental soil chemicals, such as chlorides and sulfates. Appropriate design measures for protection of reinforcement, concrete, and metal-structural components against corrosion shall be utilized, such as use of corrosion-resistant materials and coatings, increased thickness of Project components exposed to potentially corrosive conditions, and use of passive and/or active cathodic protection systems.</div>		
<div><b>MM 4.14-2: Conduct Studies to Assess Soil Characteristics and Aid in Appropriate Foundation Design.</b> Prior to the issuance of grading or building permits or Notice to Proceed, the project proponent shall demonstrate compliance with the following:</div> <div>1. The final siting of project facilities based on the results of the geotechnical study and implement recommended measures to minimize geologic hazards. The Project Proponent shall not locate project facilities on or immediately adjacent to a fault trace. The BLM and Kern County Engineering, Surveying, and Permit Services Department will evaluate any final facility siting design developed prior to the issuance of any grading or building permits or Notices to Proceed to verify that geological constraints have been avoided.</div> <div>2. The project proponents shall design cut-and-fill slopes for an adequate factor of safety, considering material type and compaction, identified during the site-specific geotechnical study. The slope of cut surfaces shall be no steeper than 2:1 (horizontal to vertical), unless the project proponents furnish a soils engineering or an engineering geology report, or both, stating that the site has been investigated and given an opinion that a cut at a steeper slope will be stable, if acceptable stabilization methods are employed and it will not create a hazard to public or private property. Other potential considerations would include structures set back from the slopes, and subsequent design recommendations.</div> <div>3. The project proponents shall avoid locating roads and structures near landslide and mudflow areas. Where avoidance of landslide areas is not feasible, the project proponents shall construct relatively flat cut-and-fill slopes not to exceed 2:1 (horizontal to vertical), or 26 percent, or flatter.</div> <div>4. The project proponents will not locate turbines, transmission lines, and/or associated structures across faults, lineaments, or unstable areas.</div> <div>5. That the utility lines crossing potentially active faults are designed to withstand vertical and horizontal displacement. If determined necessary by the findings of the site-specific geotechnical study, the project proponent shall remove and replace shrink-swell soils with a non-expansive or non-collapsible soil material.</div>	Yes	
Special Designations and Agriculture		
<div><b>MM 4.15-1: Grazing Plan for Private Lands.</b> Prior to issuance of grading permits and/or a Notice to Proceed from the BLM, the Project Proponent shall work together with the area grazing permittees to develop Best Management Practices for grazing activities which occur on private lands, and submit a guidance document to Kern County Planning and Community Development Department for review.</div>	Yes	



Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
Transportation and Public Access		
<p><b>MM 4.16-1: Construction Traffic Control Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall prepare and submit a Construction Traffic Control Plan to the Kern County Roads Department and to the California Department of Transportation for review. The Construction Traffic Control Plan must be prepared in accordance with both the Caltrans Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook (WATCH) Manual and shall include detailed information on the following:</p> <ol style="list-style-type: none"><li>1. Timing and schedule of heavy equipment and building materials deliveries;</li><li>2. Directing construction traffic with a flag person;</li><li>3. Placement of temporary signing, lighting, and traffic control device placement as required; including, but not limited to: appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;</li><li>4. Determination of the need for construction work hours and arrival/departure times outside peak traffic periods;</li><li>5. Ensure access for emergency vehicles to the project site;</li><li>6. Temporary closure of travel lanes or disruptions to street segments and intersections during materials delivery, transmission line stringing activities, or any other utility connections;</li><li>7. Maintain access to adjacent property;</li><li>8. Specification of both construction-related vehicle travel and oversize load haul routes, the minimization of construction traffic during the A.M. and P.M. peak hour, distributing construction traffic flow from State Routes 14 and 58 across alternative routes to access the project site, minimizing use of Oak Creek Road, and avoiding residential neighborhoods to the maximum extent feasible; and</li><li>9. Identification of vehicle safety procedures for entering and exiting site access roads.</li><li>10. Provisions for the establishment of a traffic control coordinator. The traffic control coordinator shall be responsible for responding to any local complaints about project construction and operational traffic concerns. The traffic control coordinator shall determine the cause of the traffic complaint and shall be required to implement reasonable measures to resolve the complaint. Signs posted along the project construction and operations access routes shall list the telephone number for the traffic control coordinator.</li></ol>	Yes	
<p><b>MM 4.16-2: Pavement Index Assessment.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall conduct a pavement index assessment and load rating analysis to ensure all access points can accommodate construction related truck traffic. The traffic index assessment shall determine the required pavement structure required to accommodate the additional truck trips and then implement pavement repairs to achieve save passage of construction-related truck traffic. The project proponent shall implement all recommendations of the pavement including roadway rehabilitation or other structural improvements. The project proponent shall coordinate with all applicable affected jurisdictions (such as the Los Angeles Department of Water and Power and Caltrans) and shall obtain any required permits prior to construction of improvements. The project proponent shall</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
implement appropriate wheel load weight distribution and/or physical improvements to aqueduct crossings to ensure such crossings are adequately protected.		
<b>MM 4.16-3: Obtain Applicable Permits.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall obtain all applicable permits from the California Department of Transportation, Kern County, and any other applicable agencies pertaining to vehicle sizes, weights, roadway encroachment, grading, and travel routes needed for the first phase of construction. The project proponent shall also obtain any additional permits needed for each remaining phase of construction prior to delivery and acceptance of materials for that phase. The project proponent shall continuously adhere to all conditions of said permits throughout implementation of the project.	Yes	
<b>MM 4.16-4: Coordination With County Roads Department.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall coordinate with the Kern County Roads Department to implement the following:  a. For those portions of the project that will use public roads, submit engineering drawings of project access road design for the review and approval of the Kern County Roads Department.  b. Obtain an encroachment permit from the Kern County Roads Department for any activities within the County road right-of-way or on applicable roads in the Kern County road maintenance system.  c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and or Kern County.	Modified	<b>Modified Mitigation Measure MM 4.16-4</b> <b>MM 4.16-4: Coordination With County Roads Department.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall coordinate with the Kern County Roads Department to implement the following:  a. For those portions of the project that will use <u>public County maintained</u> roads, submit engineering drawings of project access road design for the review and approval of the Kern County Roads Department.  b. Obtain an encroachment permit from the Kern County Roads Department for any activities within the County road right-of-way or on applicable roads in the Kern County road maintenance system.  c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and or Kern County.  <b>Reason for Modification</b> The language is revised for purposes of clarification.
<b>MM 4.16-5: Coordinate With Railroad.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall develop and coordinate with Union Pacific Railroad and the California Public Utility Commission Rail Crossings Engineering Section a crossing safety plan for all phases of project construction to address foot traffic as well as construction-related vehicle crossing and the transport of heavy/oversize loads that may occur over Union Pacific rail line as well as obtaining all required permits.	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
Vegetation Resources		
<p><b>MM 4.17-1: Habitat Restoration and Revegetation Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed by the BLM, the project proponent shall develop and submit a Habitat Restoration and Revegetation Plan to the Kern County Planning and Community Development Department and the Bureau of Land Management for review. The Plan shall be reviewed by the BLM to ensure appropriate compliance with the requirements of NEPA. The Plan shall include provisions for the following:</p> <ol style="list-style-type: none"><li>1. Restoration of all areas temporarily disturbed by project construction to pre-construction conditions; including temporary disturbance areas around structure construction sites, laydown/staging areas, and temporary access roads.</li><li>2. Provisions which show that work areas (including, but not limited to, staging areas, access roads, and sites for temporary placement of construction materials and soils) will be delineated with orange construction fencing or staking to clearly identify the limits of work. Fencing/staking shall remain in place for the duration of construction. Soils shall be stockpiled in disturbed areas lacking native vegetation or where habitat quality is poor. To the extent possible, disturbance of shrubs and surface soils due to stockpiling shall be minimized. All disturbances, vehicles, and equipment shall be confined to the flagged areas.</li><li>3. All grading activities shall include topsoil salvage. Topsoil shall be removed, stockpiled on-site, and returned to the original site or used in habitat restoration activities elsewhere on the site.</li><li>4. Hydroseeding, drill seeding, broadcast seeding or an otherwise proven restoration technique shall be utilized on all disturbed surfaces using a locally endemic native seed mix approved by the Bureau of Land Management and Kern County Engineering, Surveying and Permit Services Department.</li><li>5. The plan shall include the Best Management Practices identified in the California Department of Fish and Game Streambed Alteration Agreement, if applicable.</li><li>6. For any permanent loss of desert wash and riparian habitat, the project proponent shall mitigate at a minimum of 3:1 or as identified in the California Department of Fish and Game Streambed Alteration Agreement. All other native habitats shall be mitigated at a 1:1 ratio for permanent impacts, or as otherwise identified in the California Department of Fish and Game Incidental Take Permit or United States Fish and Wildlife Biological Opinion. Permanent impacts to ruderal or disturbed habitats shall be mitigated at a 1:1 ratio if those habitats support burrowing owl and/or desert tortoise. Permanent impacts shall be mitigated through one or more of the following:<ol style="list-style-type: none"><li>a. Through a conservation easement in perpetuity, or through acquisition and conservation in perpetuity of off-site lands which support comparable habitats and species. Restoration and/or enhancement/re-vegetation shall be conducted on mitigation lands as necessary to achieve a functional value comparable to habitats impacted by the project.</li></ol>To utilize this option, the project proponent shall acquire one of the following prior to the issuance of grading permits that would result in the disturbance of such lands: Transfer fee title to the compensation lands; a conservation easement over the lands; or both fee title and conservation easement, as required by the BLM, the Kern County Planning and</li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>Community Development Department and any other applicable agencies (such as the USFWS and/or CDFG). Any future transfer of a conservation easement or fee title must be approved by the BLM and the Kern County Planning and Community Development Department; and be made to one of the following: the CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), the BLM, or other approved public agency. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement will be recorded in favor of CDFG or another entity approved by the BLM and Kern County Planning and Community Development Department. If an entity other than CDFG holds a conservation easement over the compensation lands, the BLM and Kern County Planning and Community Development Department may require that CDFG or another entity approved by the BLM and Kern County Planning and Community Development Department, in consultation with CDFG, be named a third party beneficiary of the conservation easement.</p> <p>b. Onsite restoration, enhancement, and management (i.e., weed control, etc.) of disturbed areas not impacted by project construction.</p> <p>c. Mitigation banking.</p> <p>7. The Plan developed shall establish performance criteria and time frames for restoration of the site in addition to provisions for a monitoring program to assess the success of restoration efforts. The monitoring program will clearly identify the minimum length of the monitoring period, maintenance of restoration sites during the monitoring period, and replacement conditions. Any sites that do not meet the performance criteria within the specified time frames shall be mitigated as permanent impacts as described above.</p> <p>8. The Plan shall be developed and implemented to preserve native shrub communities to the maximum extent feasible.</p>		
<p><b>MM 4.17-2: Joshua Tree Preservation Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed by the BLM, the project proponent shall develop and submit a Joshua Tree Preservation Plan to the Kern County Planning and Community Development Department for review. The Plan shall be prepared by a qualified biologist or botanist and shall include provisions for the following:</p> <p>1. Documentation of the location and acreage of Joshua tree woodland that would be subject to permanent disturbance and a description of the field methods used to delineate acreage of Joshua tree woodland. Specific methods shall be specified for avoiding Joshua tree woodlands and suitable candidates for translocation identified.</p> <p>2. Specific efforts that will be made to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation should be flagged for protection. When non-native vegetation is removed or disturbed, then native vegetation shall be the replacement.</p> <p>3. Disclosure of the amount of acres of Joshua tree woodland to be removed. This quantification shall be used for compensation purposes.</p> <p>4. The plan shall specify that a qualified biologist shall monitor construction and all Joshua trees removed or damaged shall be recorded and replaced at appropriate mitigation ratios as specified below.</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>5. Compensatory mitigation strategy, based on one or both of the following options:</p> <p>a. Preservation. On-site or off-site preservation of Joshua tree woodland habitat shall occur on parcels that contain, at minimum, the number of individual Joshua trees impacted by the project. The project proponent may mitigate all or part of the project's impacts to Joshua trees, as follows: Delineate and designate one or more parcels for dedication for permanent conservation management; establish a conservation easement on those parcels, the easement to be held and managed by a suitable management entity as determined by the Director of the Kern County Planning and Community Development Department; prepare and implement a Habitat Management Plan to maintain habitat conditions on the site in perpetuity; and provide a non-wasting endowment sufficient to implement the habitat management plan in perpetuity. The mitigation lands shall provide habitat at a 1:1 ratio for impacted lands, comparable to habitat to be impacted by the project (i.e., similar abundance and size of Joshua trees, similar dominant vegetation community, similar levels of disturbance or habitat degradation). Suitable mitigation lands provided for other species may be used for Joshua tree woodland mitigation, at a 1:1 ratio. The Plan shall specify maintenance and monitoring requirements for each parcel, which shall include but shall not be limited to fencing and access control; signage; security and enforcement; weed control; control measures for feral animals or pets; native habitat enhancement; fire prevention and management; and other long-term habitat considerations as appropriate.</p> <p>b. In lieu monetary funding. The project proponent(s) may mitigate all or part of the project's impacts to Joshua tree woodlands by funding the acquisition and management in perpetuity of Joshua tree woodland habitat or habitats similar to those that contain impacted Joshua trees on site. Funding and management shall be provided through an existing mitigation bank (e.g., as managed by the City of Lancaster Parks, Recreation and Arts Department) or through a third-party entity such as the Wildlife Conservation Board or a regional Land Trust. The in-lieu fee shall provide sufficient funds to acquire appropriate lands to provide habitats containing Joshua trees at a 1:1 ratio for impacted lands, comparable to habitat to be impacted by the project (i.e., similar abundance and size of Joshua trees, similar dominant vegetation community, similar levels of disturbance or habitat degradation). Suitable mitigation lands provided for other species may be used for Joshua tree woodland mitigation, at a 1:1 ratio.</p> <p>6. The creation or restoration of all habitats, as mitigation for both temporary and permanent impacts, shall be monitored until established success criteria are met, to assess progress and identify potential problems with the restoration site. Remedial activities (e.g., additional planting, weeding, or erosion control) shall be taken during the monitoring period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance criteria within the established maintenance and monitoring period, monitoring shall extend beyond the initial period until the criteria are met or unless otherwise approved by Kern County and the California Department of Fish and Game.</p>		
<p><b>MM 4.17-3: Pre-Construction Surveys and Minimization Measures for Special-Status Plants.</b> Prior to issuance of grading or building permits by the County and/or a Notice to Proceed by the BLM, a qualified biologist shall conduct focused surveys during the appropriate blooming period for special-status plant species (i.e., state and federally listed Threatened and Endangered, Proposed, Petitioned, and Candidate plant species, Bureau of Land Management Sensitive species, and</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>California Rare Plant Rank 1B, 2, 3, and 4 species) within 100-feet of all surface-disturbing activities. Surveys shall be conducted according to protocols established by the United States Fish and Wildlife Service, California Department of Fish and Game, Bureau of Land Management, and the California Native Plant Society. Populations of special-status plants must be flagged and mapped prior to construction. A report of the special-status plants observed during the referenced surveys shall be prepared and submitted to the Bureau of Land Management's Authorized Officer, the Kern County Planning and Community Development Department, and the appropriate resource agencies prior to the start of construction. Impacts to non-listed special-status plant species shall first be avoided where feasible, and, where not feasible, impacts shall be compensated through reseedling with locally collected seed stock. If project activities will result in loss of more than 10 percent (10%) of the known individuals within an existing population of a California Native Plant Society List 1B, 2, 3, or 4 plant species, the project proponent shall preserve existing on- or off-site occupied habitat that is not already part of the public lands in perpetuity at a 1:1 mitigation ratio for California Rare Plant Rank 1B and 2 species and California Rare Plant Rank 3 and 4 species. The preserved habitat shall be occupied by the plant species impacted, and be of superior or similar habitat quality to the impacted areas in terms of soil features, extent of disturbance, habitat structure, and dominant species composition, as determined by the qualified biologist.</p> <p>If Bakersfield cactus is identified within the construction area, the project proponent shall submit written documentation to the Kern County Planning and Community Development Department and the Bureau of Land Management to demonstrate how the following measures to reduce impacts to the Bakersfield cactus shall be implemented:</p> <ol style="list-style-type: none"><li>1. The project proponent(s) shall work with the designated biologist(s) to identify all known Bakersfield cactus and to establish "avoidance areas." All Bakersfield cacti found within the WE-corridor shall be avoided by a buffer of 25 feet through micro-siting activities within the project area. Sturdy, highly visible, orange plastic construction fencing shall be installed around all Bakersfield cactus avoidance areas and shall be located in accordance with direction from the designated biologist(s). The fence shall be securely staked and installed in a durable manner that would be reasonably expected to withstand wind and weather events and last at least through the construction period. Fencing shall be removed upon completion of the project construction.</li><li>2. Bakersfield Cactus Translocation. Any Bakersfield cactus that cannot feasibly be avoided during construction shall be translocated according to the California Department of Fish and Game's "Cactus Translocation (Revegetation)" guidelines, or as otherwise identified in the California Department of Fish and Game Incidental Take Permit or United States Fish and Wildlife Biological Opinion. Cacti shall be translocated to a suitable, California Department of Fish and Game-approved site.</li></ol>		
<p><b>MM 4.17-4: Best Management Practices for Activities In or Near Ephemeral Drainages.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed by the BLM, the project proponent shall submit a plan which demonstrates how the project proponent will implement all mitigation measures and conditions contained within the Streambed Alteration Agreement obtained from the California Department of Fish and Game for impacts to jurisdictional areas. In addition, the following Best Management Practices shall be implemented during all construction activity in or near ephemeral drainages:</p> <ol style="list-style-type: none"><li>1. Vehicles and equipment shall not be operated in ponded or flowing water except as described</li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>in the Streambed Alteration Agreement.</p> <p>2. The project proponent shall minimize road building, construction activities, and vegetation clearing within ephemeral drainages to the extent feasible.</p> <p>3. The project proponent shall not allow water containing mud, silt, or other pollutants from grading or other activities to enter ephemeral drainages or be placed in locations that may be subjected to high storm flows.</p> <p>4. Spoil sites shall not be located within 30 feet from the boundaries of drainages or in locations that may be subjected to high storm flows, where spoils might be washed back into drainages.</p> <p>5. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering ephemeral drainages.</p> <p>6. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any drainage.</p> <p>7. No equipment maintenance shall occur within 150 feet of any ephemeral drainage where petroleum products or other pollutants from the equipment may enter these areas under any flow.</p> <p>8. Avoid placing turbine support structures in aquatic features to the maximum extent practicable.</p> <p>9. Natural washes shall be used for flood control, to the maximum extent practicable.</p> <p>10. The number of road crossings over waters shall be minimized to the extent feasible and necessary crossings shall be designed to provide adequate flow-through during storm events to the maximum extent practicable.</p>		
<p><b>MM 4.17-5: Weed Control Plan.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed by the BLM, the project proponent shall prepare a comprehensive, adaptive Weed Control Plan, for review by the Kern County Planning and Community Development Department and the Bureau of Land Management. The purpose of the plan will be to minimize the establishment and spread of nonnative and invasive weed species within the project area during construction and operation activities. The Plan shall be implemented upon commencement of construction activities and be prepared in accordance with Bureau of Land Management policy regarding weeds.</p>	Yes	
<p><b>MM 4.18-1: Reduction of Visual Contrast, Light, and Glare.</b> Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall provide evidence of the following:</p> <p>a. The project proponent shall identify construction laydown areas using already disturbed and/or are in locations of low visual sensitivity.</p> <p>b. For overhead transmission lines, tubular steel poles shall be used instead of lattice steel towers. Tubular steel poles shall be painted light-gray colors or shall be dulled galvanized steel or other non-reflective surface. All aboveground structures (tubular steel poles, cross-arms, insulators, etc.) specified for this project shall be made of materials that do not reflect or</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>refract light. All conductors specified for the project shall be non-specular, that is, they shall be treated at the factory to dull their surfaces to reduce their potential to reflect light.</p> <p>c. The Project Proponent shall submit to the BLM for review and approval a lighting mitigation plan that includes the following:</p> <ol style="list-style-type: none"><li>1. Location and direction of light fixtures that take the lighting mitigation requirements into account;</li><li>2. Lighting design that considers setbacks of project features from the site boundary to aid in satisfying the lighting mitigation requirements;</li><li>3. Lighting shall incorporate fixture hoods/shielding, with light directed downward or toward the area to be illuminated;</li><li>4. Light fixtures that are visible from beyond the Project boundary shall have cutoff angles that are sufficient to prevent lamps and reflectors from being visible beyond the Project boundary, except where necessary for security;</li><li>5. All lighting shall be of minimum necessary brightness consistent with operational safety and security; and</li><li>6. Lights in high illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have (in addition to hoods) switches, timer switches, or motion detectors so that the lights operate only when the area is occupied.</li></ol>		
<p><b>MM 4.18-2: Verification of Low Contrast Facilities and Landscaping.</b> Prior to final occupancy approval, the Kern County Building Inspector shall verify the following:</p> <p>a. All substation equipment shall be coated with a low reflectivity, neutral finish. All insulators at the substations shall be non-reflective and non-refractive. The chain-link fences surrounding the substations shall have a dulled, darkened finish to reduce contrast with its surroundings.</p> <p>b. Each wind turbine generator shall be painted a uniform light-gray color, such as, “RAL 7035” or similar, per manufacturer’s requirements. In order to minimize the reflectivity of the structures, the paint to be used shall have a gloss level that does not exceed 30 percent, or 60-70 gloss units, as calculated by the manufacturer. The surfaces of all other structures (substations, operation and maintenance building, etc.) shall be given low reflectivity finishes with neutral desert tan colors to minimize the contrast of the structures with their backdrops.</p> <p>c. Grading and landscape treatment around tower bases shall match conditions of surrounding landscape and habitat to recreate a pleasing visual environment.</p>	Yes	
<p><b>MM 4.18-3: Screening and Restoration.</b> The project proponent shall continuously comply with the following:</p> <p>a. All operation and maintenance areas shall be kept clean and tidy by storing all equipment, parts, and supplies in areas that are screened from view and/or are generally not visible to the general public.</p> <p>b. The project proponent shall remove derelict wind turbine generators and derelict parts and pieces within 60 days of decommissioning, and shall relocate such equipment, derelict parts and pieces to an area that is screened from view and/or is not visible to the general public.</p> <p>c. The project proponent shall re-vegetate disturbed soil as specified in the approved Habitat</p>	Yes	



Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
Restoration and Re-vegetation Plan.		
<p><b>MM 4.18-4: Comply with Lighting Standards.</b> The project proponent shall continuously comply with the following measures with regard to lighting:</p> <p>a. All outdoor and exterior lighting shall be the minimum required to meet safety and security standards. All light fixtures shall be hooded and/or shielded to eliminate any potential for glare effects, to prevent light from spilling off the site or up into the nighttime sky, and to minimize the potential for light trespass. In addition, the fixtures shall have sensors and switches to permit the lighting to be turned off when it is not required.</p> <p>b. Should new Federal Aviation Administration (FAA) regulations or recommendations for night lighting that reduces the number of lights or overall nighttime aesthetic impacts be approved during the life of the project, the project proponent shall consult with the Kern County Planning and Community Development Department as to the duration of time and need to feasibly implement the new standards. Feasibility of retrofitting wind turbine generators is based on the determination that the system is compatible with the turbine manufacturer warranty and that the one-time cost is not to exceed \$9,500 per installed turbine with an FAA light. Should the total to retrofit all existing lighting exceed the amount specified above, the project proponent shall consult of the Kern County Planning and Community Development Department as to which wind turbine generators shall be replaced.</p>	Yes	
<p><b>MM 4.18-5: Evaluate and Implement PCT Route Enhancement.</b> In order to mitigate for impacts that do not substantially interfere with the nature and purpose of the PCT, the project proponent shall consult and coordinate with the U.S. Forest Service, the BLM, and the Pacific Crest Trail Association to develop an off-site mitigation plan for the Pacific Crest Trail. The plan shall be submitted for review and approval to the BLM and U.S. Forest Service prior to BLM issuing a Notice to Proceed and commissioning of the wind turbines. The plan shall identify feasible land acquisition opportunities to protect the PCT corridor and to improve the PCT recreation and scenic opportunities commensurate with the recreation and visual impacts. The provisions shall be designed to apply to those areas where the project would be most visible from the existing trail. If directed by the BLM, in consultation with the U.S. Forest Service, the project proponent shall provide funds for acquisition within one year of issuance of the wind turbine generator building permit.</p> <p>Land acquisition will be based on the concepts developed in the <i>Draft Pacific Crest National Scenic Trail Best Management Practices to Mitigate Scenery Impacts from Conflicting Land Uses</i> (USFS, BLM June 2012). Under these Best Management Practices (BMP), the mitigation ratio for land acquisition is calculated by using the distance of the project from the PCT, the distance along the trail that the project is visible to trail users, and the contrast created by the project to the characteristic scenery. Under the preferred alternative, the closest the project is to the trail is 1.2 miles (middleground distance zone), is visible to trail users for approximately 1.5 miles, and creates a moderate to high contrast to the characteristic scenery. Using this scenario, the ration for land acquisition would be 1:1. Thus, the acres to be acquired off-site for mitigation to impacts to 1.8 square miles would be 1,152 acres.</p>	Modified	<p><b>Modified Mitigation Measure MM 4.18-5</b></p> <p><b>MM 4.18-5: Evaluate and Implement PCT Route Enhancement.</b> In order to mitigate for impacts that do not substantially interfere with the nature and purpose of the PCT, the project proponent shall <u>provide funds for acquisition of land along the PCT corridor. Funds will be used by the project proponent, or transferred to the BLM or a third party, to acquire property of equal value along the trail corridor. Priority will be given to acquisition within the southern Sierra Nevada/Tehachapi portion of the trail. If properties are not available for acquisition, funds may be used for restoration projects of equal value along the trail corridor that will improve visual integrity.</u> <del>consult and coordinate with the U.S. Forest Service, the BLM, and the Pacific Crest Trail Association to develop an off-site mitigation plan for the Pacific Crest Trail. The plan shall be submitted for review and approval to the BLM and U.S. Forest Service prior to BLM issuing a Notice to Proceed and commissioning of the wind turbines. The plan shall identify feasible land acquisition opportunities to protect the PCT corridor and to improve the PCT recreation and scenic opportunities commensurate with the recreation and visual impacts. The provisions shall be designed to apply to those areas where the project would be most visible from the existing trail. If directed by the BLM, in consultation with the U.S. Forest Service, t</del>The project proponent shall provide funds for acquisition within one year of issuance of the <del>wind turbine generator building permit</del> <u>Notice to Proceed from BLM.</u></p> <p>Land acquisition <del>is will</del> be based on the concepts developed in the <i>Draft Pacific Crest National Scenic Trail Best Management Practices to Mitigate Scenery Impacts from Conflicting Land Uses</i> (USFS, BLM June 2012). Under these Best Management Practices (BMP), the mitigation ratio for land acquisition is calculated by using the distance of the project from the PCT, the distance along the trail that the project is visible to trail users, and the contrast created by the project to the characteristic scenery. Under the preferred alternative, the closest the project is to the trail is 1.2 miles (middleground distance zone), is visible to trail users for approximately 1.5 miles, and creates</p>

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
		<p>a moderate to high contrast to the characteristic scenery. <u>Using this scenario, the ration for land acquisition would be 1:1. Thus, the acres to be acquired off-site for mitigation to impacts to 1.8 square miles would be 1,152 acres.</u></p> <p><u>Under the preferred alternative, 702 acres of land managed by the BLM would be visible from KOP 1. Of the total visible acreage, new structures (wind turbines) would be introduced on 180 acres that have no existing visual intrusions. The area of impacted viewshed would extend well beyond the project footprint. A mitigation ratio of 2:1 is required for this 180-acre area.</u></p> <p><u>The remainder of the visible acreage (522 acres) is impacted by existing development. Although the project would introduce additional visual contrast into this area, it is considered less substantial due to the presence of existing turbines in the vicinity of the project site. Mitigation is required at a ratio of 1:5 for a 246-acre area that is closer to the trail and in which the bulk of turbine components would be visible. Mitigation at a ratio of 1:10 is required for a 276-acre area that is further from the trail and in which lower portions of the turbines would not be visible due to the topography.</u></p> <p><u>The total required mitigation would be a fixed fee of \$383,467. This amount is based on the affected acreage ratios (437 acres), the general undeveloped land values in the region of \$650 per acre, and an additional 35% for overhead and acquisition/closing costs.</u></p> <p><b>Reason for Modification</b></p> <p>Specific compensatory land acquisition funds are identified for impacts to views from the Pacific Crest Trail based on a visibility analysis of the AEWP from KOP 1.</p>
<p><b>MM 4.19-1: Approval of Sewage Disposal.</b> Prior to the issuance of building permits by the County for an operations &amp; maintenance building and/or a Notice to Proceed from the BLM, the Proponent shall submit evidence of the following:</p> <ol style="list-style-type: none"><li>1. The method of sewage disposal for the operations and maintenance facility and any other applicable structures shall be as required and approved by the Kern County Environmental Health Services Division. Compliance with this requirement will necessitate that the Proponent obtain the necessary approvals for the design of the septic system from the Kern County Engineering, Surveying, and Permit Services Department. The septic system disposal field shall be located a minimum of 100-feet from a classified stream or 25-feet from a non-classified stream and shall not be located where it would impact State wetlands or special-status plant species.</li><li>2. The Proponent shall obtain water appropriation rights for on-site potable water to the satisfaction of the Kern County Environmental Health Services Division, if applicable.</li></ol>	Yes	
<p><b>MM 4.19-2: Submit a Road Plan to the BLM and Kern County for Review.</b> Prior to the issuance of grading/building permits from the County and/or a Notice to Proceed from the BLM, the Proponent shall submit a Road Plan to the BLM and the Kern County Engineering, Surveying, and Permit Services Department for review. The Road Plan shall include the following components:</p> <ol style="list-style-type: none"><li>1. A map/plot plan that identifies the precise location of all planned access roads and spur roads, as well as any planned improvements to existing roads.</li><li>2. A list and description of the specific improvements/modifications that would be undertaken at each location or road segment, including the planned width of each completed segment, the</li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>engineered limits of cut and fill, the location of any drainage and/or sensitive habitat within 100-feet of either edge of the planned access or spur road, and the location and construction details of any new or modified stream crossings or drainage diversion structures.</p> <p>3. Should the road plan propose a “cut” or “fill” of more than twelve (12) inches, or the movement of more than fifty (50) cubic yards of material, the road plan shall be submitted in the form of a grading permit application to the BLM and the Kern County Engineering, Surveying, and Permit Services Department for review.</p>		
<p><b>MM 4.19-3: Demonstrate Compliance with Water Quality Permits.</b> Prior to the issuance of grading/building permits from the County, and/or a Notice to Proceed from the BLM, the Proponent shall submit evidence to the BLM and to the Kern County Planning and Community Development that the following agencies have been contacted to inquire about the necessity of permits from that Agency:</p> <ol style="list-style-type: none"><li>1. California Department of Fish and Game: Streambed Alteration Permit;</li><li>2. U.S. Army Corps of Engineers: Clean Water Act Section 404 permit;</li><li>3. Lahontan Regional Water Quality Control Board: Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with construction activities, Stormwater Pollution Prevention Plan (SWPPP) with Best Management Practices (BMPs) for stormwater management, a Clean Water Act Section 401 certification, and/or Waste Discharge Requirement permit(s).</li></ol> <p>Where a permit is required, the Proponent shall provide a copy of all the conditions required by that agency to BLM and Kern County, as applicable. The Proponent shall maintain and make available on site at all times an approved copy of all required permits and conditions.</p>	Yes	
<p><b>MM 4.19-4: Submit a Drainage Design Plan.</b> Prior to the issuance of grading/building permits from the County, and/or a Notice to Proceed from the BLM, the Proponent shall submit a Drainage Design Plan to the BLM and the Kern County Department of Engineering, Survey and Permits Services for review. The plan shall include provisions for the following:</p> <ol style="list-style-type: none"><li>1. Groundcover for the new substation shall be comprised of a pervious and/or high-roughness material (for example, gravel) to the maximum extent feasible, in order to ensure maximum percolation of rainfall after construction.</li><li>2. Detention/retention basins shall be installed to reduce local increases in runoff, particularly on frequent runoff events (up to 10 year frequency).</li><li>3. Downstream drainage discharge points shall be provided with erosion protection and designed such that flow hydraulics exiting the site mimic the natural conditions as much as possible.</li><li>4. On-site drainage from impervious surfaces (e.g., roads, driveways, buildings) shall be directed to a common drainage basin;</li><li>5. The project shall design as few basins as possible for the entire development;</li><li>6. Where feasible, mass grading and contouring shall be done in a way to direct surface runoff towards the above-referenced basins (and/or closed depressions); and,</li><li>7. Identify the location of all temporary and permanent fencing. Ensure fencing will not entrain</li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
debris/sediment or interfere with natural flow patterns to the maximum extent practicable based on applicable hydrological and performance criteria.		
<b>MM 4.19-5: Develop a Water Supply Contingency Plan.</b> Prior to the issuance of building permits from the County and/or a Notice to Proceed from the BLM, the Proponent shall develop and submit a Water Supply Contingency Plan to the BLM and the Kern County Planning and Community Development Department for review. The Plan shall be prepared by a hydrogeologist and shall include results from a groundwater investigation of any groundwater resources to be used during project operation and maintenance; groundwater would not be pumped by the Proponent to support project construction or decommissioning. The purpose of the groundwater investigation shall be to determine whether the identified groundwater resource(s) is in overdraft conditions; the investigation may include review of historic groundwater well data, groundwater monitoring, hydrologic modeling, and/or interviews with private well owners. Groundwater resources from basin(s) determined to be in long-term overdraft conditions shall not be used to meet project water supply requirements. Additionally, the plan shall contain provisions for ongoing monitoring of water supply well(s) used during project-related operation and maintenance activities, as deemed necessary by Kern County.	Yes	
<b>MM 4.19-6: Construction Site Dewatering Management.</b> If groundwater is unexpectedly encountered during construction, operation, or decommissioning of the project, dewatering activities shall be performed in compliance with the California Stormwater Quality Association (CASQA) Handbook for Construction or other similar guidelines, as required by the BLM and/or by Kern County. The Proponent shall notify the BLM, Kern County, and Lahontan RWQCB at the onset of dewatering activities, and submit written description of all executed dewatering activities, including steps taken to return encountered groundwater to the subsurface, upon the completion of dewatering activities at the affected site(s).	Yes	
<b>MM 4.19-7: Develop Master Drought Water Management and Water Conservation Education Programs.</b> Prior to the issuance of building permits from the County and/or a Notice to Proceed from the BLM, a master Drought Water Management Plan shall be prepared by the Proponent and submitted to the BLM for review and approval. The Plan shall include measures on how future water use will be managed during “severe” drought year(s). These measures would go into effect during periods of “severe” drought and shall remain in effect until it is shown satisfactorily to the BLM that the “severe” drought condition no longer exists. This Plan shall include the following:  <ol style="list-style-type: none"><li>1. The definition of a "severe" drought year (as defined by the National Oceanic and Atmospheric Administration's (NOAA) Palmer Drought Severity method or other similarly recognized methodology);</li><li>2. Identification of general measures available to reduce water usage for future development (to be refined as needed for each use approved);</li><li>3. Identification of specific measures to be applied for landscape watering;</li><li>4. Determination of appropriate early triggers to determine when "severe" drought conditions exist and process for initiating additional water conservation measures for [tract] and future development.</li><li>5. A master Water Conservation Education Program for all future operators and employees for use during drought periods. The Program shall be implemented throughout the construction,</li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
operation, and decommissioning of the project.  6. Provisions which state that for any year that a “severe drought” state has been recognized, the Proponent shall submit a letter to the BLM by November 1 of that year identifying what measures were implemented to conserve water, as well as the effectiveness of such measures.		
<b>MM 4.20-1: Fire Safety Plan.</b> Prior to the issuance of grading or building permits by the County, and/or a Notice to Proceed by the BLM, the project proponent shall develop and submit a Fire Safety Plan for review by the BLM and Kern County Fire Department. The Fire Safety Plan shall specify the notification procedures and emergency fire precautions to be implemented during the construction and operation of the project and shall contain maps of the project site and access roads, along with descriptions of how the following procedures will be implemented:  1. All internal combustion engines used at the project site shall be equipped with spark arresters. Spark arresters shall be in good working order.  2. Light trucks and cars shall be used only on roads where the roadway is cleared of vegetation. Mufflers on all cars and light trucks shall be maintained in good working order.  3. Fire rules shall be posted on the project bulletin board at the contractor’s field office and areas visible to employees.  4. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.  5. Personnel shall be trained in the practices of the Fire Safety Plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats.  6. The Project Proponent shall make an effort to restrict use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall easily accessible to personnel.  7. Smoking shall be prohibited in wildland areas and within 50 feet of combustible materials storage, and shall be limited to paved areas or areas cleared of all vegetation.  8. Fires ignited onsite shall be immediately reported to BLM FIRE and the Kern County Fire Department.  9. The engineering, procurement, and construction contract(s) for the proposed project shall clearly state the requirements of this mitigation measure.  10. The project proponent shall confer with the BLM and Kern County Fire Department regarding the need to install dip tanks within the project site. Should dip tanks be required, the project proponent shall construct dip tanks as specified by the BLM and/or Kern County Fire Department.	Yes	
<b>MM 4.20-2: Fire Truck Funding.</b> Prior to energizing the project, the project proponent shall perform one of the following options in consultation with the Kern County Planning and Community Development Department, the Kern County Fire Department and the County Administrative Office to reduce fire impacts:	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>Option 1: Install an automatic fire extinguishing system that complies with international standards for fire protection systems on each wind turbine generator at the project site. Proof of system installation shall be submitted to Kern County.</p> <p>Option 2: Purchase at a cost not to exceed \$350,000 an Industrial Mini Pumper for the Kern County Fire Department. If an Industrial Mini Pumper has already been purchased for the project area, the Fire Department shall consult with the County Administrative Office (CAO) to determine if there are any outstanding reimbursement requirements associated with that purchase. If the Industrial Mini Pumper has not yet been fully reimbursed by the County, then the project proponent shall pay their proportionate share of \$88,000.00 to the Planning and Community Development Department for the purpose of reimbursement of the pumper.</p> <p>Option 3: If an Industrial Mini Pumper has already been purchased and reimbursed by the County, the purchase of other fire extinguishing equipment shall occur in an alternative manner that has been mutually agreed upon by the project proponent and Kern County.</p>		
<p><b>MM 4.20-3: Emergency Response Liaison – Fire.</b> The project proponent shall continuously comply with the following during implementation of the project: When a Red Flag Warning is issued by the National Weather Service for the project area, all non-emergency construction and maintenance activities shall cease. This provision shall be clearly stated in the Fire Safety Plan. The Emergency Response Liaison shall ensure implementation of a system that allows for immediate receipt of Red Flag Warning information from the Los Angeles/Oxnard office of the National Weather Service.</p>	Yes	
<p><b>MM 4.21-1: Designated Biologist.</b> Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, the project proponent shall employ a Designated Biologist and shall comply with the following:</p> <ol style="list-style-type: none"><li>The project proponent shall submit evidence to the Kern County Planning and Community Development Department and to the Bureau of Land Management which demonstrates that the Designated Biologist holds the following credentials:<ol style="list-style-type: none"><li>A Bachelor’s degree with an emphasis in ecology, natural resource management, or related science;</li><li>Three (3) years of experience in field biology or a current certification of a nationally recognized biological society such as The Ecological Society of America or the Wildlife Society;</li><li>Previous experience with applying terms and conditions of a Biological Opinion; and,</li><li>An appropriate permit and/or training if conducting focused or protocol surveys for listed or proposed species.</li></ol></li><li>The Designated Biologist shall be employed for the duration of all construction activities and for any required post-construction biological monitoring and reporting activities; including, but not limited to: annual reporting on habitat restoration, post-construction avian and bat mortality monitoring, etc.</li><li>The Designated Biologist shall have the authority to ensure compliance with all applicable mitigation measures and requirements as set forth by the appropriate regulatory Agencies; including: Kern County, the Bureau of Land Management, the U.S. Department of Fish and Wildlife, the California Department of Fish and Game, and other agencies with appropriate</li></ol>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>jurisdictional authority. The Designated Biologist will have the authority and responsibility to halt any project activities that are in violation of the terms of the applicable mitigation measures and requirements.</p> <p>4. The Designated Biologist shall continuously be subject to the following responsibilities:</p> <p>a. Notify the Bureau of Land Management's Authorized Officer, the Kern County Planning and Community Development Department, and the Wildlife Agencies at least 14 calendar days before initiating ground-disturbing activities;</p> <p>b. Immediately notify the Bureau of Land Management's Authorized Officer, the Kern County Planning and Community Development Department, and the Wildlife Agencies in writing if the project proponent does not comply with any of the terms of the Biological Opinion and/or the 2081 take authorization including, but not limited to, any actual or anticipated failure to implement such measures within the periods specified;</p> <p>c. Conduct compliance inspections daily during on-going construction as clearing, grubbing, and grading are completed, and submit a monthly compliance report to the Bureau of Land Management's Authorized Officer until construction is complete.</p>		
<p><b>MM 4.21-2: Wildlife Impact Avoidance and Minimization.</b> Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, the project proponent shall submit written documentation to the Kern County Planning and Community Development Department and the Bureau of Land Management of the following:</p> <p>1. That the grading plans have minimized, to the greatest extent feasible, the area required for temporary construction work and operational activities. Except for permanent exclusionary fencing for desert tortoise, all fences installed on the project site will be a maximum of eight (8) feet in height, constructed of four (4) strand barbed wire or materials of a higher quality, with a smooth bottom wire at least eighteen (18) inches from the ground to facilitate wildlife movement during operation of the project.</p> <p>2. Evidence that the Designated Biologist has been retained to monitor construction activities and to recover and relocate ground-dwelling special-status species as encountered during construction. Any capture and relocation activities shall require the appropriate scientific collecting permits issued by the California Department of Fish and Game (CDFG), if applicable. The recovery and relocation of ground-dwelling special-status species shall not include any species listed under the federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); unless, the project proponent obtains the appropriate permit authorization as issued by the United States Fish and Wildlife Service and CDFG.</p> <p>3. Evidence that a Worker Education Awareness Program will be administered to all construction and operational crew members, and that the program is available in English and Spanish. Training materials and briefings shall include, but not be limited to: discussion of the Federal and State Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act; the consequences of non-compliance with these acts; identification and values of plant and wildlife species and significant natural plant community habitats; actions and reporting procedures to be used if desert tortoise, California condor, golden eagle, burrowing owl, Swainson's hawk, Mohave ground squirrel, or American badger are encountered; fire protection measures; measures to minimize the spread of weeds during construction; hazardous substance spill prevention and containment measures; a contact</p>	Yes	

Mitigation Measure in the PA/FEIS	Adopted (Yes/Modified)	Modified Mitigation Measure and Reason for Modification
<p>person at the on-call biological services provider in the event of the discovery of dead or injured wildlife; driving procedures and techniques to reduce mortality of wildlife on roads; and, review of mitigation requirements. A copy of the worker education training materials shall be provided to the United States Fish and Wildlife Service.</p> <p>4. Evidence that the following design measures have been met on the final plot plan:</p> <p>a. All ground-disturbing work and any work involving hazardous materials shall be conducted at least 100 feet from wetlands.</p> <p>b. Specifications for wind tower foundations shall provide at least a 2,500-square-foot (50 feet by 50 feet) clear vegetation zone.</p> <p>c. Turbine specifications shall ensure that the lower reach of rotor blades is no lower than 85 feet above the ground surface.</p> <p>5. Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, the project proponent shall submit a Wildlife Mortality Reporting Program to the Bureau of Land Management and Kern County Planning and Community Development Department for review. This program shall be implemented during construction and operation, and shall require the identification and reporting of any dead or injured animals (both special-status and common species) observed by personnel conducting construction and operation activities. Reporting is necessary during construction and operation to demonstrate compliance with the avoidance and minimization measures, to assess the effectiveness of the measures, and to make recommendations, if necessary, for future compliance. The program shall also include provisions to stop work within the immediate vicinity if a dead special-status species is encountered. The project proponent shall notify the BLM, Kern County Planning Department, the on-call biologist, and the appropriate resources agency (e.g., USFWS or CDFG) before construction is allowed to resume. An appropriate reporting format shall be developed in coordination with the Bureau of Land Management, Kern County Planning and Community Development Department, United States Fish and Wildlife Service, and California Department of Fish and Game.</p> <p>6. A speed limit of 15 miles per hour will be maintained on all dirt access/maintenance roads, and all vehicles must remain on designated access/maintenance roads.</p> <p>7. Night lighting required during construction shall be directed toward the interior of the disturbance area or at the specific location being constructed in order to minimize adverse effects to wildlife in off-site areas.</p>		
<p><b>MM 4.21-3: Pre-Construction Surveys and Minimization Measures for Special-Status Wildlife and Nesting Birds.</b> Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, the project proponent shall submit written documentation to the Kern County Planning and Community Development Department, the Bureau of Land Management, the California Department of Fish and Game, and/or the United States Fish and Wildlife Service, that the following pre-construction surveys have been prepared:</p> <p>1. Pre-construction surveys for nesting birds if construction, ground disturbance, and/or vegetation trimming/removal activities are scheduled to occur during the breeding season (February 1 to August 31). A qualified biologist shall conduct the breeding bird surveys within three (3) days prior to the start of construction, ground disturbance, or vegetation trimming/removal activities to identify the presence of breeding birds protected by the</p>	Yes	



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<p>Migratory Bird Treaty Act, California Fish and Game Code Sections 3503 and 3503.5, the Bald and Golden Eagle Protection Act, and the California and federal Endangered Species Acts. Should riparian habitats be encountered on the site, pre-construction nesting surveys for southwestern willow flycatcher, gray vireo, and western yellow-billed cuckoo following the most current United States Fish and Wildlife Service protocols for each species will be conducted. If a nesting listed riparian bird is detected, a 500-foot disturbance-free buffer will be established and Kern County, California Department of Fish and Game, and/or the United States Fish and Wildlife Service (as appropriate) shall be notified. If nesting birds are encountered during preconstruction nesting surveys and/or sweeps, a 300-foot disturbance-free buffer shall be established around each nest, and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. Buffer sizes may be modified in consultation with the California Department of Fish and Game and/or the United States Fish and Wildlife Service.</p> <p>If nesting golden eagles are identified, a 1/4-mile no-activity buffer will be implemented when nests have a direct line of sight to the work area. If the work area is not within direct view of the nest, the no-disturbance buffer shall be 660 feet. Nest buffers for eagles and other nesting birds may be adjusted to reflect existing conditions including ambient noise, topography, and species' disturbance tolerance with the approval of the appropriate resource agencies (California Department of Fish and Game and/or United States Fish and Wildlife Service).</p> <p>Should project construction or operation result in an anticipated need to move a bird nest during nesting season, the project proponent shall first obtain written documentation providing concurrence from the United States Fish and Wildlife Service and the California Department of Fish and Game authorizing the nest relocation. The project proponent shall provide a written report to the Kern County Planning and Community Development Department, the United States Fish and Wildlife Service, and the California Department of Fish and Game documenting the relocation efforts. The report shall include what actions were taken to avoid moving the nest, the location of the nest, what species is being relocated, the number and condition of the eggs taken from the nest, the location of where the eggs are incubated, the survival rate, the location of the nests where the chicks are relocated, and outcome (whether or not the chicks survived and fledged). Should any applicable Agency determine that the nests cannot be moved, the project proponent shall not move the nests.</p> <p>2. Pre-construction nesting surveys will be conducted within one-half (1/2) mile of areas with potentially suitable nesting habitat for Swainson's hawks no more than 30 days prior to commencement of construction. If a nest site is found, consultation with California Department of Fish and Game and the United States Fish and Wildlife Service shall be required to ensure project construction will not result in nest disturbance. No new disturbances or other project-related activities that may cause nest abandonment or forced fledging shall be initiated within one-half (1/2) mile of an active nest between March 1 and September 15, or unless otherwise authorized by the California Department of Fish and Game and the United States Fish and Wildlife Service, as required. These buffer zones may be adjusted as appropriate in consultation with a qualified ornithologist, the California Department of Fish and Game and the United States Fish and Wildlife Service. If impacts to nesting Swainson's hawks cannot be avoided, the California Department of Fish and Game and the United States Fish and Wildlife Service shall be consulted regarding the potential for incidental take authorization.</p> <p>3. Pre-construction surveys for the Mohave ground squirrel will be conducted within all suitable habitat prior to initial ground-disturbing activities, including along the transmission line route.</p>		

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<p>Surveys shall include a map of all potentially suitable habitat within the project area and along the transmission line route. The name and phone number of the biologist(s) proposed for the survey effort shall be provided to the California Department of Fish and Game and to the United States Fish and Wildlife Service at least 14 days before the initiation of ground-disturbing activities. If a Mohave ground squirrel is found on the construction site, work shall be halted and redirected to areas not supporting this species unless an incidental take authorization from the California Department of Fish and Game and/or the United States Fish and Wildlife Service directs otherwise. A written report shall be sent to California Department of Fish and Game and the United States Fish and Wildlife Service within five (5) calendar days of the sighting. The report will include the date, time of the finding or incident (if known), and location of the animal. If a dead Mohave ground squirrel is encountered the remains shall be collected, frozen as soon as possible, and California Department of Fish and Game and the United States Fish and Wildlife Service shall be contacted to determine where the remains will be sent.</p> <p>If Mohave ground squirrels are detected during any project surveys, the project proponent shall provide the Kern County Planning and Community Development Department and the Bureau of Land Management with a map of all occupied habitat associated with the project. The project proponent shall also consult with the California Department of Fish and Game and the United States Fish and Wildlife Service regarding the potential for incidental take authorization.</p> <p>4. Pre-construction surveys for American badger will be conducted within suitable habitat no more than 30 days prior to the start of construction activities. If present, occupied badger dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during pup-rearing season (February 15 through July 1) and a minimum 200 foot buffer established. Maternity dens shall be flagged for avoidance, identified on construction maps, and a Biological Monitor shall be present during construction. If avoidance of a non-maternity den is not feasible, the project proponent shall consult with the California Department of Fish and Game, Bureau of Land Management, the United States Fish and Wildlife Service and the Designated Biologist regarding relocation procedures.</p> <p>5. Pre-construction surveys for desert kit fox will be conducted within suitable habitat no more than 30 days prior to the start of construction activities. If present, occupied kit fox dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den avoided. Maternity dens shall be flagged for avoidance, identified on construction maps, and a biological monitor shall be present during construction. If an occupied desert kit fox den is encountered, all work in the immediate vicinity shall stop until the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Designated Biologist are consulted for the appropriate course of action.</p> <p>6. Surveys for roosting bats shall be conducted during the maternity season (March 1 to July 31) for any project area that is located within 300 feet of rocky outcrops or other habitat capable of supporting bat nursery colonies. These areas shall be surveyed by a qualified bat biologist. Surveys shall include a minimum of one (1) day and one (1) evening visit. If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (i.e., not removed). If avoidance of the roost is not feasible, the bat biologist shall survey (through the use of radio telemetry or other methods approved by California Department of Fish and Game) for nearby alternative maternity colony sites. If the bat biologist determines, in consultation with and with the approval of the California Department of</p>		

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<p>Fish and Game, that there are alternative roost sites used by the maternity colony and young are not present, then no further action is required. However, if there are no alternative roost sites used by the maternity colony, provision of substitute roosting bat habitat is required. If active maternity roosts are absent, but a hibernaculum (i.e., a non-maternity roost) is present, then exclusion of bats prior to demolition of roosts is required.</p> <p>a. If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use within one (1) mile of the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three (3) months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bats' requirements in coordination with California Department of Fish and Game, the Bureau of Land Management, and Kern County Planning and Community Development Department. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The California Department of Fish and Game shall also be notified of any hibernacula or active nurseries within the construction zone.</p> <p>b. If non-breeding bat hibernacula are found in rocky outcrops scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, according to timing and under the direction of the qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one (1) week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost. This action should allow all bats to leave during the course of one (1) week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one (1) night between initial disturbance and the grading or tree removal).</p> <p>If an active maternity roost is located in an area to be impacted by the project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.</p> <p>7. Pre-construction surveys for burrowing owls shall be conducted in conformance with the California Department of Fish and Game's Staff Report on Burrowing Owl Mitigation (CDFG, 2012), within all suitable habitat within a 150-meter(492 foot) buffer zone of each work area, or as otherwise authorized by the California Department of Fish and Game. The project proponent shall submit the results of the pre-construction survey to the Bureau of Land Management's Authorized Officer, the Kern County Planning and Community Development Department, the California Department of Fish and Game, and the United States Fish and Wildlife Service. The project proponent shall also submit evidence of conformance with federal and State regulations regarding the protection of the burrowing owl by demonstrating compliance with the following:</p> <p>a. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31); unless a qualified biologist approved by California Department of Fish and Game verifies through non-invasive methods that either the birds have not begun egg-</p>		

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<p>laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Eviction outside the nesting season may be permitted pending evaluation of eviction plans (developed in accordance with California Department of Fish and Game protocol for burrowing owls) by California Department of Fish and Game and receipt of formal written approval from the California Department of Fish and Game authorizing the eviction.</p> <p>b. Any damaged or collapsed burrow that shows evidence of use by burrowing owl will be replaced with artificial burrows in adjacent habitat.</p> <p>c. Unless otherwise authorized by California Department of Fish and Game, a 250 foot buffer, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls during the nesting season (February 1 through August 31). This protected area will remain in effect until August 31 or at California Department of Fish and Game's discretion and based upon monitoring evidence, until the young owls are foraging independently. A 160-foot disturbance-free buffer will be maintained around all occupied burrows during the non-breeding season (September 1 through January 31). Disturbance-free buffers may be modified based on site-specific conditions in consultation with the California Department of Fish and Game.</p> <p>d. If accidental take (disturbance, injury, or death of owls) occurs, the Designated Biologist will be notified immediately.</p> <p>e. Impacts to burrowing owl territories shall be mitigated through a combination of off-site habitat compensation and/or off-site restoration of disturbed habitat to native habitat capable of supporting this species. The acquisition of occupied habitat off-site shall be in an area where turbines would not pose a mortality risk. Acquisition of habitat shall be consistent with the California Department of Fish and Game's Staff Report on Burrowing Owl Mitigation (CDFG, 2012). The preserved habitat shall support native vegetation, and shall be occupied by burrowing owl and shall be of superior or similar habitat quality to the impacted areas in terms of soil features, extent of disturbance, habitat structure, and dominant species composition, as determined by a qualified ornithologist. Preservation of cultivated lands will not be allowed in order to ensure the habitat will be preserved in perpetuity. The site shall be approved by the California Department of Fish and Game. Land shall be purchased and/or placed in a conservation easement in perpetuity and managed to maintain suitable habitat. The offsite area to be preserved can coincide with off-site mitigation lands for permanent impacts to sensitive vegetation communities, with the approval of the Bureau of Land Management and the California Department of Fish and Game.</p> <p>8. Prior to the issuance of grading or building permits by the County and/or a Notice to Proceed from the BLM, the project proponent shall submit written documentation to the Kern County Planning and Community Development Department and to the Bureau of Land Management demonstrating how the following desert tortoise mitigation will be implemented during construction activities:</p> <p>a. Temporary tortoise-proof fencing shall be erected and maintained between the project construction areas and suitable desert tortoise habitat before initiating clearance surveys for desert tortoise and construction on the project site. Installation of fencing will be monitored by a Biological Monitor. Fencing shall be maintained with oversight from a Biological Monitor and/or the Designated Biologist.</p>		

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<p>b. Continuous weekly verification by a Biological Monitor shall occur to ensure that a tortoise has not been trapped within the fence and the fence remains intact.</p> <p>c. Two desert tortoise clearance surveys shall be conducted immediately after constructing the tortoise-proof fence. The surveys shall cover 100 percent of the exclusion area.</p> <p>d. Trash receptacles at the work site will have self-locking lids to prevent entry by opportunistic predators such as common ravens and coyotes.</p> <p>e. Whenever a vehicle or any construction equipment is parked longer than 15 minutes within desert tortoise habitat, the ground around and underneath the vehicle will be inspected for desert tortoises prior to moving the vehicle. If a desert tortoise is observed, a Biological Monitor shall be contacted. The tortoise shall be left to move on its own. Tortoises shall not be handled unless otherwise authorized by the Biological Opinion and 2081 take authorization.</p> <p>f. A Biological Monitor shall be on site to survey for tortoises immediately in front of vegetation clearance activities including, but not limited to, construction sites, staging areas, and access routes in the event a tortoise was inadvertently missed during clearance surveys.</p> <p>g. Potential desert tortoise burrows found in the construction zone, whether occupied or not, shall be avoided by realignment of the construction path. If realignment is not feasible, then the United States Fish and Wildlife Service and the California Department of Fish and game shall be consulted to determine whether burrow excavation is feasible, and to obtain authorization for excavation and relocation of tortoise(s) and/or egg(s), if applicable. Des-ert tortoise burrows and pallets that fall outside of, but within 50 feet of, the construction work area shall be flagged for avoidance.</p> <p>h. Construction pipe, culvert, or similar structures with a diameter greater than three (3) inches and stored less than eight (8) inches above ground on the construction site for one or more nights shall be inspected for tortoises and other special-status wildlife before the material is moved, buried, or capped. As an alternative, structures may be capped before being stored on the construction site.</p> <p>i. Open trenches shall be fenced with temporary tortoise-proof fencing or inspected by authorized personnel periodically, at the beginning and at the end of each day, and immediately before backfilling. Any tortoise that is found in a trench shall be promptly removed by authorized personnel in accordance with the Biological Opinion. If the biologist is not allowed to enter the trench for safety reasons, the United States Fish and Wildlife Service will be contacted immediately for authorization to proceed with alternative methods.</p> <p>j. Within 90 days of completion of project activities, the Designated Biologist shall submit a report to the Bureau of Land Management's Authorized Officer, Kern County Planning and Community Development Department, United States Fish and Wildlife Service, and California Department of Fish and Game documenting the numbers and locations of desert tortoises encountered, their disposition, effectiveness of protective measures, practicality of protective measures, and recommendations for future measures that allow for better protection or more workable implementation.</p> <p>k. The Designated Biologist shall notify the Bureau of Land Management, Kern County Planning and Community Development Department, United States Fish and Wildlife</p>		

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<p>Service, and California Department of Fish and Game within 24 hours upon locating a dead or injured desert tortoise during the construction phase of the project. The notification shall be made by telephone and in writing to the Bureau of Land Management's Authorized Officer, United States Fish and Wildlife Service, California Department of Fish and Game, and Kern County Planning and Community Development Department. The report shall include the date and time of the finding or incident (if known), location of the carcass, a photograph, cause of death (if known), and other pertinent information. Tortoises fatally injured during project-related activities shall be submitted for necropsy.</p> <p>I. The Designated Biologist and/or Biological Monitor shall be present during maintenance outside the established tortoise exclusion areas to assist in the implementation of protection measures for the desert tortoise and to monitor compliance.</p> <p>m. If any operation and maintenance activity must be conducted during the desert tortoise active period (March 15 to May 31 and September 1 to October 31) that may result in ground disturbance, such as weed management or vehicular access off of a designated access/maintenance road, a Biological Monitor shall be present during such activity to ensure that no desert tortoise mortality results.</p>		
<p><b>MM 4.21-4: Raven Management Plan.</b> Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, a Raven Management Plan shall be developed for the project site in consultation with the United States Fish and Wildlife Service and California Department of Fish and Game. Implementation of the Raven Management Plan only applies to areas that are desert tortoise habitat. The Raven Management Plan will require measures such as annual nest removal by a qualified biologist in consultation with the California Department of Fish and Game and the United States Fish and Wildlife Service, removal of carrion at the base of wind turbine generators, storage of garbage in raven-proof containers, and installation of anti-nesting devices on structures where raven nests could be built. In addition, to offset the cumulative contributions of the project to desert tortoise from increased raven numbers, the project proponent shall also contribute to the United States Fish and Wildlife Service Regional Common Raven Management Program through the payment of fees not to exceed \$105 per disturbed acre. This number shall be verified utilizing the formula established by the Desert Managers Group.</p>	Yes	
<p><b>MM 4.21-5: California Condor.</b> Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, the project proponent shall submit written documentation to the Bureau of Land Management's Authorized Officer, the Kern County Planning and Community Development Department, California Department of Fish and Game, and the United States Fish and Wildlife Services of the following regarding the California condor:</p> <p>1. A qualified biologist with demonstrated knowledge of California condor identification will be on site to monitor all construction activities within the project area and assist the project proponent in the implementation of the monitoring program.</p> <p>2. Workers will be trained on the issue of microtrash and its potential effects to California condors. In addition, daily sweeps of the work area will occur to collect and remove trash. All spills of ethylene glycol will be cleaned up immediately and a report documenting the actions taken to remediate the spill will be provided to Bureau of Land Management, Kern County</p>	Yes	

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<p>Planning and Community Development Department, United States Fish and Wildlife Service, and California Department of Fish and Game within five (5) calendar days of the incident.</p> <p>3. As part of the Worker Education Awareness Program, the project proponent shall develop a flier that will be distributed to all workers on the project concerning information on the California condor. Information to be included consists of the following: species description with photos and/or drawings indicating how to identify the California condor and how to distinguish condors from turkey vultures and golden eagles; protective status and penalties for violation of the federal and California Endangered Species Acts; avoidance measures being implemented on the project; and contact information for communicating condor sightings. A copy of the flier shall be submitted to the Bureau of Land Management's Authorized Officer and Kern County Planning and Community Development Department to demonstrate compliance with this mitigation.</p> <p>4. All California condor sightings in the project area during construction will be reported directly to the United States Fish and Wildlife Service, California Department of Fish and Game, Bureau of Land Management, and Kern County within 24 hours.</p> <p>5. The project proponent shall provide written documentation to the Kern County Planning and Community Development Department and the Bureau of Land Management showing implementation of the following additional measures:</p> <p>a. Bird flight diverters shall be installed on all temporary meteorological tower guy wires constructed as part of the project. All permanent meteorological towers shall be free-standing and not contain guy wires.</p> <p>b. During periods of livestock grazing, a full-time monitor shall be present to ensure immediate removal of carcasses on the project site. These practices shall include a full-time monitor during periods of livestock grazing that will be present to ensure immediate removal of carcasses from the project site to an off-site location far enough from wind developments so as not to present a risk to condors foraging on the carcasses. The monitor shall also assist in designating an area for burial of carcasses or, alternatively, assist the rancher in removing the carcasses to the nearest County landfill site that accepts dead livestock. The project proponent shall also ensure that the monitor is verifying that all watering troughs are inaccessible to wildlife (covered, empty, etc.) during periods when grazing is not occurring.</p> <p>c. The applicant shall work together with the area grazing permittees to develop Best Management Practices to minimize attraction of condors to the project area</p> <p>d. Funding for conservation measures such as radio telemetry, condor feeding programs, or other such measures as deemed appropriate shall be provided to the California Condor Recovery Program. Funding shall be calculated at six (6) units per one hundred (100) turbines installed as part of the project. Prior to the issuance of any building or grading permits for the first (1st) turbine, the project proponent shall fund six telemetry units in the amount of \$188,100 (\$4,150 per unit plus an "endowment" of \$163,200 to be used for tracking data over an eight-year period). Prior to the issuance of any building or grading permits for the one-hundred-and-first (101st) turbine, the project proponent shall fund six additional telemetry units in the amount of \$188,100 (\$4,150 per unit plus an endowment of \$163,200 to be used for tracking data over an eight year period). The total funding to be provided shall not exceed \$376,200 or funding requirements in the</p>		

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Biological Opinion, whichever is greater.		
<b>MM 4.21-6: Avian and Bat Protection Plan.</b> Prior to the issuance of building permits by Kern County and/or a Notice to Proceed from the BLM, the project proponent shall submit a current copy of their Avian and Bat Protection Plan, or equivalent document, to the Kern County Planning and Community Development Department and the Bureau of Land Management.	Yes	
<b>MM 4.21-7: Eagle Conservation Plan.</b> Prior to the issuance of building permits by Kern County and/or a Notice to Proceed from the BLM, the project proponent shall provide documentation to the California Department of Fish and Game, United States Fish and Wildlife Service, and the Kern County Planning and Community Development Department that the project is in compliance with the Bald and Golden Eagle Protection Act (Title 16, United States Code, sections 668 668c).	Yes	
<b>MM 4.21-8: Lighting Specifications to Minimize Bird and Bat Collisions.</b> Prior to the issuance of grading or building permits by Kern County and/or a Notice to Proceed by the BLM, and to reduce collisions of avian and bat species with turbines, the project proponent shall submit written documentation to the Kern County Planning and Community Development Department and the Bureau of Land Management demonstrating coordination with the Federal Aviation Administration to minimize the number of wind turbine generators and meteorological towers that require night lighting and to use lighting that would minimize attraction of birds and bats to the project area. The project proponent shall utilize only red, or dual red and white strobe, strobe-like, or flashing lights, not steady burning lights, to meet Federal Aviation Administration requirements for visibility lighting of WTGs, permanent met towers, and communication towers. Only a portion of the turbines within the wind project should be lighted, and all pilot warning lights should fire synchronously.	Yes	
<b>MM 4.21-9: Minimize Avian and Bat Turbine Strikes.</b> Prior to turbine commissioning or other turbine operations or issuance of approval for final occupancy by Kern County, the project proponent shall submit written documentation to the BLM and Kern County Planning and Community Development Department, the California Department of Fish and Game (CDFG), and the United States Fish and Wildlife Service (USFWS) showing that the following measures to reduce avian and bat impacts from turbine activities have been implemented:  1. Wherever feasible, turbines shall not be sited on or immediately adjacent to the upwind sides of ridge crests.  2. Turbine construction shall minimize cutting into hill slopes in an attempt to achieve smooth rounded terrain, rather than sudden berms or cuts, to reduce prey abundance.  3. Rocks unearthed during the excavation process shall be used during construction of foundations or hauled off site and disposed of properly, and not be left in piles near turbines to avoid providing cover for prey.  4. Discourage small mammals and reptiles from burrowing under or near turbine bases by placing gravel at least 5 feet around each tower foundation.  5. The wind component developer shall not participate in rodent control programs on leased lands and will discourage landowners from using poisoning for rodent control in the vicinity of the project.  6. All meteorological towers shall be un-guyed, unless evidence is provided that topography,	Yes	



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<p>safety, access and/or climate conditions prohibit free standing towers. Any proposed temporary meteorological towers which utilize guy wires will require review and authorization by Kern County on a case-by-case basis and shall require use of bird deterrents. Temporary MET towers shall only be permitted for three years.</p> <p>7. Prior to turbine commissioning or any turbine operation, the project proponent, in consultation with the BLM (on federal lands) and/or Kern County Planning and Community Development Department (on private lands) shall implement one of the following options for reducing impacts to the California Condors:</p> <p>A) The project proponent shall provide a plan to the BLM, the CDFG, and the USFWS for review and approval for implementing full-time human observation, during daylight hours, for condor activities on the project site and a sufficient buffer outside the project to ensure that if a condor is sighted turbines may be safely shut down prior to a condor reaching the strike hazard. This distance will be determined in close coordination with USFWS and CDFG, defined as the turbine operation area (TOA), for the term of the grant. The condor observation site(s) within the TOA will be identified in the plan and shall be staffed by a qualified avian biologist who is approved by the BLM, the CDFG, and the USFWS. The observation sites will provide 100% coverage of the project area plus buffer to ensure that a condor could not visually be missed should it be flying in the area. Observation shall be conducted year-round during all daylight hours of operations, including 30 minutes prior to sunrise and 30 minutes after sunset. By accessing the project's SCADA system, each approved observer will have the authority to curtail all turbine operations in the TOA if a condor enters this area. These protocols could be adapted, with approval from FWS and CDFG, if future data collection and analyses demonstrate the newly proposed protocols would meet a 100% avoidance criteria.</p> <p><b>OR</b></p> <p>B) The project proponent shall submit for review and approval a Condor Monitoring and Avoidance Plan utilizing a reliable Condor Monitoring System (CMS) that will detect VHF-tagged condors. The purpose of this plan is to outline the procedures and compliance steps undertaken by the project proponent to implement focused curtailment of proposed wind turbine generators when a California Condor is detected with a range of up to, but not exceeding 16 miles away.</p> <p>The placement of any such CMS will be approved by Kern County in consultation with USFWS, CDFG, BLM and shall include at a minimum the following components:</p> <ul style="list-style-type: none"><li>• Receiver with datalogger</li><li>• Antenna switchbox with amplifier</li><li>• Omnidirectional antenna</li><li>• PC with Internet connection</li><li>• Transmitter for receiver qualification testing, as well as for use as a sentinel signal once permanently deployed.</li></ul> <p>The CMS shall include, but not be limited to, the following procedures or components:</p> <p>1. Curtailment of wind farm operations shall commence at the time a condor comes within 1 mile of the project site. Curtailment Sectors (groups of turbines) have been identified and shall be built into the software controls for the wind farm. Curtailment</p>		

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<p>commands may be given for curtailment of specific sectors or all sectors of the facility at the discretion of the Project Site Observer.</p> <p>2. Wind turbine speeds can be reduced to 15 miles per hour (mph) from 60 to 90 seconds after the curtailment commend is given, depending on the type of turbine. If the project installs turbines that require 90 seconds to reach this speed a distance of 2 miles shall be used to trigger the curtailment command instead of 1 mile. No turbines shall be installed that do not have the ability to curtail within 90 seconds.</p> <p>3. Telemetry antennae towers shall be placed to avoid blind spots that would allow transmitted condors to enter the wind farm with little advance warning. A lattice detection network shall be implemented.</p> <p>4. If a condor signal is detected and then subsequently lost, the condor shall be treated as if it is moving towards the project site. If the Project Site Observer cannot establish initial visual contact with the condor, the observer shall spend the remainder of the day on high alert until 30 minutes after sunset. The observer shall continually use hand-held VHF detection equipment and visual lookout in order to send a curtailment command if a condor comes within 1 mile of the project site. Close-Proximity Response shall be practiced in order to facilitate observer search image refinement. Small remote aircraft may be operated within 4 miles of the wind turbines to perform drills and reduce full-time observer response time.</p> <p>5. If a condor has triggered the detection system and subsequently the signal is lost, and the Project Site Observer cannot locate the condor either visually or with a receiver, one of the following procedures shall be implemented:</p> <p>a. Good visibility weather conditions (i.e., no fog or sand storm) allows for detection by the observer, but the terrain or distance to the condor prevents visual observation. Unless the observer believes a threat exists, curtailment will not be required as the observer will be able to see the condor as it moves closer into visible range. The curtailment command will not be issued until the condor is seen within the 1 mile perimeter of the project site.</p> <p><b>OR</b></p> <p>b. Poor visibility weather conditions (i.e., heavy fog or sand storm) preclude detection of the condor by the observer, regardless of terrain or distance to the condor. This scenario shall result in curtailment because the observer may not be able to see the condor.</p> <p>6. If condor movement result in consistent alarms of a bird entering the detection area, but it remains far from the wind turbines, the following procedures shall be implemented:</p> <p>a. Once the Project Site Observer communicates that no condor is within 1 mile of the project it will be the responsibility of other Condor Incident Response Team (CIRT) members to search until a visual location is made of the condor that triggered the alert or the alert has lapsed. After a full search for the condor that has triggered an alert, CIRT members may be directed by the CIRT Lead to discontinue monitoring if a condor is not visually detected. The CIRT Lead can direct the CIRT members to discontinue the attempt to</p>		

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<p>visually locate a condor if the signal strength detected by the detection network is too low or the project site has sufficient detection ability should the condor come within 1 mile of the project site. However, the Project Site Observer shall spend the remainder of the day on high alert until 30 minutes after sunset. The observer shall continually use hand-held VHF detection equipment.</p> <p>b. The SCADA operator and CIRT members will continually monitor visual and VHF information specific to any condor locations. If a CIRT member has visually detected a condor, they will relay location relative to the project site, landmarks, direction of flight, and flight behavior to the CIRT team. If the SCADA operator has a VHF detection of a condor, they will relay transmitter frequency, relative direction from the antenna, and signal strength to the CIRT team. Additionally, every two minutes all CIRT members will receive the information by text and email on their digital devices if a condor is within the detection perimeter.</p> <p>c. If a condor is visually located and reported as “moved out of the detection network perimeter,” the Project Site Observer will visually scan the area around the project site. This will occur each time the condor enters the detection network perimeter.</p> <p>d. The CIRT, in responding to subsequent condor alerts for any period of time for a condor that is reoccurring, will take information from previous responses such as transmitter frequency, relative direction from antenna, and signal strength into account to determine if there is a particular condor that is occurring more regularly than historically reported. The frequency, location, and duration of reoccurring condor alerts will be used by the CIRT Lead to determine the relative level of risk that exists and how the future response by the CIRT will be carried out in order to avoid condor mortality at the project site. At no time will an alert be ignored regardless of the number of times a condor may trigger the detection system.</p> <p>7. If a condor roost is identified within the 16-mile detection radius of the telemetry tower, the project proponent shall consult with the USFWS as required based on condor behavior and tracking information. Constant on-site surveillance shall be required if a condor frequents the detection area due to a roost. Refinement in the detection of specific condors that establish or use a new roost may be necessary. Details for refining the monitoring and detection of changed occurrence patterns of future condors will be based on specific behavior observed as changes occur. No reduction by CIRT in response to detection alerts shall occur.</p> <p>If specific condors are roosting in a new area inside the network detection perimeter, one option for monitoring would involve installation of additional antennas. Condor VHF frequencies can be programmed into a secondary antenna that has a smaller detection range centered at the project site. This secondary antenna will be programmed to only scan for condors that are known to be regularly using a roost within the 16 mile perimeter and will only scan to a 3 mile radius. Scanning for condors that roost within the detection network perimeter, but do not enter areas within 3 miles of the project site can be accomplished with two</p>		

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<p>antennas each set to monitor different risk zones. This will allow for initiation of the appropriate response by CIRT when a condor that regularly triggers alerts within the 16 mile perimeter, triggers an alert within 3 miles of the project site.</p> <p>8. The project proponent shall implement the following protocol for recording and reporting condor detections and the proponent’s responses to detections:</p> <p>a. The project proponent will staff the CIRT Lead position with a full-time biologist. The CIRT Lead will be responsible for coordination with USFWS staff regarding report of data collected by the network detection system. USFWS will provide the point of contact for such coordination. A reporting protocol with the USFWS will be established.</p> <p>b. The project proponent will report a condor alert that results in a visual observation and/or curtailment order that occurs for the project.</p> <p>c. A central data collection and reporting system will be developed to organize and manage information regarding the network detection system.</p> <p>d. A copy of the CIRT Log on response to a detection alert will be provided to the USFWS within 48 hours of completion.</p> <p>e. BLM and the project proponent agree that further refinement of the protocol will be implemented during the consultation process.</p> <p>9. The project proponent shall implement the following protocol for communicating with the Condor Recovery Program regarding re-tagged condors or release of new birds:</p> <p>a. The CIRT Lead will acquire weekly updates on the current list of VHF frequencies in use by the Condor Recovery Program. Email is the current method of data sharing and will continue under the project. As an alternative, the Condor Recovery Program can update the CIRT Lead as birds are re-tagged on a real-time basis.</p> <p>b. CIRT will be trained on the programming and maintenance of both fixed and handheld telemetry equipment that will include weekly updates of receivers for the most current VHF frequencies.</p> <p>c. Hardware will be developed to remotely update the fixed network detection system.</p> <p>d. Update frequencies will be programmed into handheld and fixed telemetry equipment on a weekly basis or as changes occur.</p> <p>e. BLM and the project proponent agree that further refinement of the protocol will be implemented during the consultation process.</p> <p>The system shall be active during daytime hours, which includes 30 minutes prior to sunrise and 30 minutes after sunset, for a period of 3 years. During this initial testing period, the project proponent shall submit quarterly reports to Kern County, USFWS, CDFG, and BLM regarding the system’s findings and curtailment activities. After a period of 3 years, the system will be evaluated by Kern County, BLM, USFWS, and CDFG for overall effectiveness in detecting and implementing focused curtailment related to reducing impacts to the California condor. If after a period of 3 years it is determined by the reviewing agencies that</p>		

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<p>additional measures or modifications to the system are necessary to ensure the system is effective in detecting and implementing focused curtailment measures for the California condor, those measures will be implemented by the project proponent through operational adjustments approved by the reviewing agencies.</p> <p>Due to the 30-year life of this project, and the anticipation that the Condor Recovery Program will continue to be successful, the risk of condor take would increase if the condor population increases, condor use areas change (i.e., moving closer to the project site), and/or if fewer individuals of the flock wore VHF-units. Each of these changes would result in an increase in risk. To be able to off-set this potential increase in risk, the following adaptive management strategy shall be implemented:</p> <ol style="list-style-type: none"><li>1. Change in condor use areas. If a condor is detected within the network detection perimeter more than once during a 30-day period or two or more times during a 60-day period, or if a condor has been detected near the project boundary several times (which will be defined in the Biological Opinion), the BLM, USFWS, and the project proponent shall enter into discussions regarding the circumstances of these detections to determine the appropriate action.</li></ol> <p>Potential circumstances include, but are not limited to: a) use of the area is increasing and a greater number of birds are flying within the area of risk; b) birds are entering the area more frequently, but at an altitude that does not place them in harm's way for collision with a turbine; c) bird use has shifted in proximity of the project site, but has already shifted away again; or, d) one bird is responsible for all of the on-site detections.</p> <p>During discussions, the BLM and USFWS will determine whether reinitiation of Section 7 consultation is needed based on the new information on condor movement. Should reinitiation be determined the appropriate action, the BLM would complete a Section 7(d) analysis to determine what actions could occur during reinitiation. While the BLM is completing the Section 7(d) analysis, one of the two following measures would also be implemented:</p> <ol style="list-style-type: none"><li>a. Within 24 hours of notice from the BLM and/or USFWS, the project proponent shall deploy a full-time observer to supplement the VHF-detection system until the Section 7(d) analysis is complete, or should the 7(d) analysis propose this measure, until the reinitiation of consultation is complete</li></ol> <p><b>OR</b></p> <ol style="list-style-type: none"><li>b. Within 24 hours of notice from the BLM and/or USFWS, the project proponent shall deploy a proven alternative detection system (e.g., radar system that had been previously been tested and accepted by USFWS)</li></ol> <li>2. Change in percentage of population wearing VHF-units (short-term). During the first 5 years of the project, if the percentage of birds that are invisible to the detection system is exceeded by a pre-determined amount due to an unanticipated event (e.g., extreme weather prevents replacement of dying batteries, manufacturer fails to ship units), one of the following procedures shall be implemented:<ol style="list-style-type: none"><li>a. If the project proponent has already deployed a proven and approved alternative detection system that does not rely on birds being tagged for</li></ol></li>		

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<p>detection, no further action is needed.</p> <p>b. If the project proponent has not deployed the alternative detection system that does not rely on birds being tagged for detection, but has one that has been proven effective, it will be deployed within 24 hours notice by the BLM or USFWS, or,</p> <p>c. The project proponent shall deploy a full-time observer within 24 hours notice by the BLM or USFWS to supplement the VHF-detection system until the non-tagged birds are captured and refitted with VHF-units.</p> <p>3. Change in percentage of population wearing VHF-units (long term). The project proponent shall develop and deploy an alternative detection system that does not rely on any hardware to be affixed to condors. This system shall be incorporated into their “detect and curtail” strategy within the first 3 years of operation. USFWS would be responsible for maintaining VHF-birds at a pre-determined level for a maximum of 3 years. After such time, the USFWS, with a 60-day notice, could begin transitioning to sampling the population and would no longer be responsible for maintaining transmitters for a pre-determined percent of the flock. If the project proponent has not successfully identified another means to detect and curtail, the project would be out of compliance with the Biological Opinion, and reinitiation of the Section 7 consultation would be triggered. The BLM would conduct a Section 7(d) analysis to determine what actions could occur during reinitiation.</p>		
<p><b>MM 4.21-10: Post-Construction Breeding Monitoring.</b> Once the project is operational, the project proponent shall conduct Post-Construction Breeding Monitoring in the first, second, and third years following the initial operation of the project. Additional years of monitoring may be required by an appropriate Agency such as the United States Fish &amp; Wildlife Service. The purpose of this monitoring would be to demonstrate whether sensitive resident birds are compatible with operation of wind turbine generators, and to show that the level of incidental injury and mortality does not result in a long-term decline in sensitive resident bird species in the region. Post-construction Breeding Monitoring shall include a Nesting Analysis that shall be conducted as follows:</p> <p>1. The project proponent shall provide to the Kern County Planning and Community Development Department, the Bureau of Land Management, the California Department of Fish and Game, and the United States Fish and Wildlife Service the results of a study and comparative data analysis. A qualified ornithologist shall conduct the study of nesting raptors.</p> <p>2. Nesting raptor surveys shall be conducted throughout the project site between February 15 and August 15.</p> <p>3. Directed field surveys for nesting raptors shall be conducted during the breeding season by vehicle and on foot to determine the presence or absence of raptor nests, especially mid-sized to large raptor nests within suitable habitat areas.</p> <p>4. If at the end of the second round of monitoring (three years following the initial operation of the project), the operation of wind turbine generators has been determined to result in a level of incidental injury and mortality to nesting birds that constitutes a significant adverse impact on a breeding population, the project proponent shall undertake supplemental compensatory measures to support regional conservation of migratory birds.</p>	Yes	

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5. The results of the Nesting Analysis shall be made available to regional entities involved in research related to the conservation of nesting birds such as the Audubon Society.		
<p><b>MM 4.21-11: Post-Construction Avian and Bat Mortality Monitoring.</b> Once the project is operational, the project proponent shall perform Post-Construction Avian and Bat Mortality Monitoring in the first, second, and third years following the initial operation of the project to demonstrate the level of incidental injury and mortality to populations of avian or bat species in the vicinity of the project site. Additional years of monitoring may be required by an appropriate Agency such as the United States Fish &amp; Wildlife Service. Post-Construction Avian and Bat Mortality Monitoring shall include a Mortality Analysis, which shall be conducted as follows:</p> <ol style="list-style-type: none"><li>1. The project proponent shall provide to the Kern County Planning and Community Development Department, the Bureau of Land Management, the California Department of Fish and Game, and the United States Fish and Wildlife Service the results of the mortality monitoring for avian and bat species on an annual basis. A qualified wildlife biologist shall conduct mortality monitoring using a statistically significant sample size of operational turbines within the wind energy development project.</li><li>2. The Mortality Monitoring Analysis shall note species number, location, and distance from the turbine for each recovered bird or bat, availability of bird and bat prey species, and apparent cause of avian or bat mortality. The project proponent shall provide all results to the Wildlife Response and Reporting System database within 90 days of completion of the annual study.</li><li>3. The Mortality Monitoring shall follow standardized guidelines outlined by the California Energy Commission and California Department of Fish and Game (CEC and CDFG, 2007) and the United States Fish and Wildlife Service (USFWS, 2010) or more current guidance from the United States Fish and Wildlife Service, and shall include carcass scavenging and searcher efficiency trials.</li><li>4. At a minimum, the Mortality Monitoring Analysis shall consider four factors:<ol style="list-style-type: none"><li>a. Number of annual avian and bat mortalities per turbine,</li><li>b. Disproportionate representation of a particular species, and</li><li>c. Comparison to existing data on wind farm mortality.</li><li>d. Comparison to existing data on wind farm mortality from the Tehachapi Wind Resource area and the western United States.</li></ol></li><li>5. In addition to Mortality Monitoring described above, starting in year 1 of project operation and continuing for the life of the project, annual Post-Construction Mortality Monitoring for golden eagle shall be conducted by the project proponent, in conjunction with other monitoring, and submitted to the Kern County Planning and Community Development Department, the Bureau of Land Management, the United States Fish and Wildlife Service, and the California Department of Fish and Game.</li></ol>	Yes	
<p><b>MM 4.21-12: Supplemental Measures for Unanticipated Significant Impacts.</b> After three years of Post-Construction Avian and Bat Mortality Monitoring, the project proponent shall consult with the Kern County Planning and Community Development Department, the Bureau of Land Management, the California Department of Fish and Game, and United States Fish and Wildlife Service, to determine if the project is resulting in unanticipated significant adverse impacts on the population of an avian or bat species or is significantly interfering with any migratory corridor. If this</p>	Yes	

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<p>determination is made, the project proponent shall provide supplemental mitigation as determined by the Agencies listed above. In accordance with California Environmental Quality Act Guidelines Section 15065 and Appendix G, a significant impact shall be determined on a species-by-species basis according to the following criteria:</p> <ol style="list-style-type: none"><li>1. Cause an protected avian or bat species to drop below self-sustaining levels;</li><li>2. Threaten to eliminate a bat or avian community;</li><li>3. Substantially reduce the number or restrict the range of an endangered, rare or threatened species;</li><li>4. Substantially impair movement through any migratory corridor; or</li><li>5. Have a substantial adverse effect on any candidate, sensitive or special status avian or bat species.</li></ol> <p>Supplemental measures to be considered shall include:</p> <ol style="list-style-type: none"><li>1. Additional migration count surveys, conducted using a methodology that allows comparison with the baseline surveys conducted in 2010/2011.</li><li>2. Provision of additional nesting structures or platforms.</li><li>3. Contribution to research that addresses the sources of mortality and population impacts on the species of concern.</li><li>4. Funding of regional conservation measures with the intent of enhancing and preserving existing foraging and nesting habitat in an amount not to exceed the value of acreage representing the project's rotor swept area based on installed turbines.</li></ol>		
<p><b>MM 4.21-13: Avian Power Line Interaction Committee Standards.</b> Prior to issuance of approval for final occupancy by Kern County, the project proponent shall submit written documentation to the Bureau of Land Management and Kern County Planning and Community Development Department demonstrating that all power lines are engineered and constructed to the most current Avian Power Line Interaction Committee standards, at the time the lines are engineered. The project proponent shall conform to the latest practices to protect birds from electrocution and collision on the transmission line (as outlined in the 2006 Avian Power Line Interaction Committee standards or newer guidance, as applicable).</p>	Yes	
<p><b>MM 4.21-14: Post-Construction Condor Monitoring.</b> Condor observations made within the project area and identified buffer must be reported to Kern County, BLM, USFWS, and CDFG within 24 hours of the observation. Behavior of the birds, meteorological conditions at the time, and any subsequent curtailment must be reported. Additionally, all such individual reports shall also be provided in quarterly reports on condor activity to the BLM and Kern County Planning and Community Development Department for the term of the grant. The reports shall include all condor sightings, conditions at the time condors are within the project area (e.g. time, duration, temperature, wind speed, and direction), curtailments, duration of curtailments, and number of turbines affected. In the event of take (including harassment or harm) of California condor beyond the habitat removal authorized in the project's Biological Opinion, the project proponent shall</p> <ol style="list-style-type: none"><li>1. Within 24 hours, the holder shall notify the BLM authorized officer, the USFWS, and the Kern County Planning and Development Department.</li></ol>	Yes	



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<p>2. If take in the form of harassment occurs, all turbines shall be restricted to nighttime operations only, curtailing daylight operations for two weeks.</p> <p>3. Continuous daylight observations shall be made for the two-week curtailment period.</p> <p>4. After the two-week period, the project proponent shall provide reports (including condor observations and meteorological conditions) to the BLM, USFWS, and Kern County Planning and Development Department.</p> <p>5. The BLM and the USFWS and CDFG shall determine if conditions of increased risk to condors continue to exist, and therefore nighttime-only operations should continue, or if the conditions have changed such that risk to condors is again low and daylight operations may resume.</p> <p>6. Steps 3, 4, and 5 will continue until such time that daylight operations have been allowed to resume.</p> <p>In the event of a condor mortality the applicant shall:</p> <p>1. Immediately cease all turbine operations.</p> <p>2. Notify the BLM authorized officer, USFWS, CDFG, and the Kern County Planning and Community Development Department.</p> <p>3. In preparation for reinitiation of formal Endangered Species Act consultation for the project, submit a plan for review and approval to the BLM, the USFWS, and CDFG along with the Kern County Planning and Development Department for developing and implementing additional specific condor avoidance and minimization measures including, but not limited to, radar and telemetry curtailment measures. Turbine operations shall not resume until reinitiated Section 7 consultation is complete and a revised project Biological Opinion is issued.</p>		